Hospital

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NEW CHALLENGES **FOR HOSPITALS**

As this issue appears the year 2010 is already almost behind us. The transition to a new year offers the opportunity to both look back to the old one and to look ahead to the next one.

Newly elected EAHM President, Heinz Kölking valued the work of 2010 as a new chapter in the history of our association. Not only because of the election of the new Board and the Executive Committee during the general assembly and congress in Zurich, but also because of our reflection process. A process that resulted in the development of a medium-term strategic plan in response to the structural changes in European healthcare systems and in hospitals themselves.

These structural changes are multifaceted but they have one thing in common: the need for effective crisis management and strategic planning to ensure hospitals are adequately supplied. This topic is the central focus of the current issue of *(E)Hospital*. There is a strained financial situation in many European countries but this is not the only reason for these structural changes. Less access to financing is a long-term situation for hospitals necessitating structural change. This issue includes an account of the consequences of the financial crisis in French hospitals and of the measures taken to overcome it.

New crisis management strategies are often required in hospitals. For example, how to cope with an epidemic or, like in the Irish hospitals, if an act of nature prevents the delivery of needed material goods. Besides the examples we focus on in this issue there are also other challenges to overcome, including demographic change (aging populations), new developments in medicine and techniques, our occupational image, the number of healthcare sector jobs available and the basic working conditions nationally and Europe-wide.

Thanks to our reflection group, the focal points of the EAHM programme will be orientation guides for management, adhering to our basic structural conditions. Our target is to impart know-how to colleagues – both theoretical and practical – so that they can cope with their responsibilities. Our members should be active, not only concerning their management duties in their own hospital but also within the activities of the EAHM.

As part of our new strategy, the EAHM programme has been designed from the bottom up, first with the national federations and then at the association level (in the three advisory boards and in the working groups). The new constitution is announced in our EAHM news section (See page 6).

At this point, we would like to thank all the colleagues who have helped during this reflection process, sharing their valuable time and knowledge. Their contribution will be retained for the EAHM as well as for the hospitals. Now it is important to implement the ideas of the reflection process in the newly elected advisory boards and in exchanges with the national associations. We will report about this in the journal and on our website. Every member and reader is invited to share their own knowledge and experience, we are looking forward to another constructive and enriching exchange of experiences. In this spirit, I would like to wish you a happy and successful 2011 in the name of the EAHM Board and Executive Committee.

Willy Heuschen
Editor-in-Chief,
Secretary General

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.

Crisis Management

Hospitals must always be prepared for crisis. Recently our hospitals have had to deal with several of these crises. In this issue Gilberto Felipe Vazquez de Anda tells us how Mexican hospitals coped as the first country to deal with AH1N1 epidemic; the measures they took to manage the crisis and how they became better prepared for the second outbreak. Managing Editor Lee Campbell spoke to Fionnuala Barker from St. Luke's hospital in Dublin to learn how the closure of European airspace brought nuclear medicine to a halt in Ireland and Mike Clumpner and Jim Mobley ask us to reconsider just how prepared we are for disaster.

Medtech: Nuclear Medicine

This issue's medtech section focuses on nuclear medicine. Prof. Gustav K. von Schulthess discusses the pros and cons of investing in hybrid imaging systems likening choosing a hybrid system to choosing a new car. Questioning the sustainability of nuclear medicine mentioned in the cover story Dervla Gleeson explains the current situation in detail and explores alternative strategies to ensure supplies for nuclear medicine.

Focus: SPAIN

The Spanish National Healthcare System ("Instituto Nacional de la Salud"), founded on Spain's General Healthcare Act of 1986, guarantees universal coverage and free healthcare access to all Spanish nationals, regardless of economic situation or participation in the social security network. Spain has among the world's healthiest people with an average life expectancy of 81, one of the highest in the EU. However, one of the principle problems in Spain remains the limited coordination between the Autonomous Communities, which increases disparities in services and quality of care between the regions.

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The European Association of Hospital Managers (EAHM) is proud to invite you to the *IT @ Networking Awards 2011*, a global healthcare IT and medical technology competition.

IT @ 2011 will recognise and promote outstanding healthcare IT and medical technology projects. 25 nominees from across Europe and beyond will compete in the *IT @ Networking Awards 2011* on January 19 – 20 2011. This high-level competition will see candidates go through two rounds of presentations in an effort to convince the expert audience and panel of judges why their solution deserves to win. If last year is anything to go by, attendees will not hold back in cross-examination of each presenter during the Q&A sessions before placing their vote for their favourite solutions.

WHY ATTEND THE IT @ NETWORKING AWARDS 2011?

This event will give you the possibility to expand your general and in-depth knowledge on IT solutions. Every presentation is strictly structured according to our presentation cri-

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teria. Such criteria allows for a cross-departmental understanding of each solution.

Uniquely, *IT @ 2011* requires all presenters to talk about the key problems they have encountered in creation or implementation. By highlighting honestly the problems and obstacles encountered, they provide the audience with an excellent tool for advancing similar issues in their own institutions.

IT and medical technology is of key importance to hospital management, especially considering the current financial constraints and increasing pressure our healthcare systems are faced with. Intelligent IT solutions increase cost-effectiveness, productivity and safety.

HOW IT WORKS

IT @ 2011 is a two-day event comprising two rounds of presentations. During the first day, 25 projects will be showcased in a Mindbyte presentation. Mindbytes are short and straight to the point. In just five minutes, each presenter will highlight the main advantages of their project and convince the audience they want to know more. After each presentation you, the expert audience, and our panel of judges will place their votes. The top nine presentations make it through to the second day of competition where they are given the opportunity to present their projects in detail. This Workbench presentation has an allocated time of 30 minutes followed by 15 minutes of cross-examination.

WHAT SETS US APART

What differentiates *IT @ 2011* from other congresses? The main difference lies in the element of competition. Yes, *IT @2011* features presentations from across the world. But these are presentations with a difference, competitors are presenting to win; they have a completely different mindset. Each presenter will do the best to secure the top prize, to persuade the audience and judges that their solution deserves to win. The Q&A sessions also take on a new dimension with presenters having the opportunity to cross-examine their competitors.

HOW TO REGISTER

EAHM members are eligible for a reduced rate. For this special fee you can enjoy two days of informative presentations of fully implemented and running IT and medical technology projects. Moreover, you will have a say in who will win the trophy. Refreshments, lunch and evening entertainment are also included, giving ample opportunity for networking.

To register, please visit:
https://www.conftool.net/itawards2011/

LOCATION

IT @ 2011 will take place in the famous Theatre de Vaudeville, a most stimulating environment in the Gallerie de la Reine, the centre of Brussels.

Hotel reservations can be obtained through www.booking.com.

For more information please visit our website www.itandnetworking.org or contact us on +32/2/2868501 or send an email to office@hitm.eu

We look forward to seeing you in Brussels in January!

NEW COMPOSITION OF THE EAHM SUBCOMMITTEES

During its meeting of October 15th, the Board decided on the composition of the subcommittees. We would like to share here with you the names of the members of the subcommittees together with a short description of each subcommittee as they play an important role in the dynamics of our association.

Scientific Subcommittee (SSC)

The scope of the SSC is related to the promotion of the professional competence of the EAHM-members. It also assures also the scientific level and relevance of the themes of the different activities organised by the EAHM.

The members of the SSC for 2010-2014 are:

Gerry O'Dwyer, President of SSC
Regional Director of Operations, Health Service Executive (Ireland)
Ugo Luigi Aparo
Directeur Sanitaire , Istituto Dermopatico dell'Immacolata, IDI-IRCCS (Italy)
Matthias Bracht
Vorstandsvorsitzender, Mühlenkreiskliniken AöR, Johannes Wesling Klinikum Minden (Germany)
Kristof Eeckloo
Academic Policy Advisor, University Hospital Ghent (Belgium)
Rolf Gilgen
Spitaldirektion, Stadtspital Waid Zürich (Switzerland)
Doris Gillig
Directrice Qualité et gestion des risques, CH de Mulhouse (France)
Asger Hansen
Advisor international affairs DSS, Danish Association of Health Care Management (Denmark)
Paul Junck
Président, Entente des Hôpitaux Luxembourgeois (Luxemburg)
Jørn Koch
Commisioner, Central Region (Denmark)
Danielle Rossi Turck
Prof. emer. Hospital management (Belgium)

Subcommittee "European Affairs" (SCEA)

Objectives of the SCEA include fostering the growing together of the hospital systems of the European countries as the basis for the construction of a Social Europe and seeking to influence European Union legislation affecting the hospital sector, in short bridging between Europe and the hospital manager.

The members of the SCEA for 2010-2014 are:

Marc Hastert
President of the SCEA
Secrétaire Général, Entente des Hôpitaux Luxembourgeois (Luxembourg)
Gediminas Cerniauskas
Associate professor, Faculty of Economics and Finance Management, Mykolas Romeris University (Lithuania)
Richard Dooley
Network Manager Network1, Health Service Executive South East (Ireland)
Victor Herdeiro
Administrador, Hospital Pedro Hispano (HPH) (Portugal)
Oly Ilunga Kalenga
Deputy Medical Director, Brussels Europe Hospitals (Belgium)
Marino Maligoi
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Mieczyslaw Pasowicz
Dyrektor, Krakowski Szpital Specjalistyczny im. Jana Pawla II (Poland)
Corinne Séneschal
Directrice déléguée, CH de Calais (France)

The Editorial Board

The Editorial Board works on the contents of this journal which is published 5 times a year. *(E)Hospital* plays a very important role in sharing experiences and information on hospital management amongst our members.

The members of the Editorial Board for 2010-2014 are:

Nikolaus Koller
President of the Editorial Board, Krankenhaus Betriebsdirektor, Landeskrankenhaus Bruck an der Mur (Austria)
Juraj Gemes
Vicepresident, F.D. Roosevelt University Hospital (Slovakia)
Ann Marie O'Grady
Head of Clinical Services, Beaumont Hospital (Ireland)
Cédric Arcos
Directeur de Cabinet - Directeur de la communication Hospices Civils de Lyon (France)
Freddy Iemants
Directeur general. RH – HR, I.R.I.S. Hospitals (Belgium)

For more information:
www.eahm.eu.org

Maurice Van Oyen

In 1965 Mr Maurice van Oyen was nominated manager of the Sint-Janshospitaal, a hospital with 800 years of history, located in the city centre, on the site which is called nowadays "Oud Sint-Jan". In the late sixties he was one of the promoters of constructing a total new and

modern regional hospital outside the city, the "AZ Sint-Jan". He remained director until 1991.

He was in favour of international contacts, exchange and experience on medical as well on management level, a tradition which is still alive in the Sint-Janshospitaal.

He was one of the founding members of the EAHM in 1970 and was active for more than 20 years in our association.

Call for Participation in the Payment Preferences Survey

In times of both quality and cost challenges for healthcare across the world, payment mechanisms to remunerate care providers and to invest in care services are under close scrutiny. Policy makers are increasingly examining and/or implementing innovative schemes that alter the scope and criteria of payment for healthcare.

Aside of salary, common examples of payment schemes are: Fee For Service, Prospective Payment and Capitation. New forms are introduced such as Pay for Performance, Bundled/global payment, Shared Savings, Prometheus, Warranties, etc.

Despite growing scientific evidence of effects of various payment methods, in the end how care providers are paid depends on the negotiation and preferences of multiple stakeholders (physicians, managers, policy makers, etc.). At present those preferences are scarcely known: how stakeholders value various payment system affects which tradeoffs they make and how these choices differ between stakeholder groups. Furthermore, the fit with the latest scientific evidence is often not clear.
A research consortium of three European Universities (Leuven, Ghent and Antwerp) is currently organising a survey study across Europe, the US and Australia to shed light on these issues. The survey will take place in the period January 1st – February 15th of 2011 and takes about half an hour to complete. This research is supported by international research experts from Europe, the US and Australia.

Healthcare managers, policy makers, researchers and physicians are invited to express their preferences for payment systems and payment effects. Participants will receive a detailed study report explaining the results and findings, with comparisons across health systems and across stakeholder groups.

As hospital managers are continuously confronted in their daily work with the consequences of provider payment schemes in terms of quality of care, equity, continuity, cost, unintended consequences, etc. The European Association of Hospital Managers lends its support to this study and encourages all of its members to participate.

To start the survey: www.eahm.eu.org/surveys

UK
Highest Rates of Clostridium Difficile in Europe

A study published in The Lancet has found that Britain has the highest number of cases of Clostridium difficile in Europe. The research, which involved hospitals in 29 countries in Europe, looked for the bug and in particular a dangerous type known as 027.

The study revealed that Europe-wide the 027 strain made up only five percent of total C diff cases and was the sixth most prevalent type of the bug. However in Britain, the 027 strain made up at least a quarter of cases of C diff with around 25,500 cases of the bug annually.

The study's chief author Dr Martijn Bauer, of the Leiden University Medical Centre, and the National Centre for Infectious Disease Control, in the Netherlands, said many of the hospitals which had the highest numbers of C difficile infection came from countries in northern and central Europe.

A spokesman for the Health Protection Agency said: "Since 2007 the rate of C difficile infection (CDI) in England has fallen markedly from 11.1 cases per 10,000 population in 2007/08 to 5.1 per 10,000 population in 2009/10." "Hospitals are encouraged to continue to submitting samples, so that they can be best placed to continue to identify clusters of cases and so prevent and control CDI. This will also afford the greatest chance of identifying emergent C difficile ribotypes, including those that are more common in some other countries in Europe."

Germany
German Healthcare Reform

After a long fight, the controversial healthcare reform bill was finally passed in November. The reform means mandatory health insurance charges presently split evenly between employers and workers will rise from 14.9 percent to 15.5 percent of gross wages. Moreover, further increases will be paid for by employers only.

The German healthcare system is highly regarded in Europe and further afield. It takes care of 72 million people through state health insurance and 8.5 million through private schemes.

Parliament also approved a set of rules to limit the power of pharmaceutical companies to set prices in the market. There are now limits on how much pharmaceutical companies can charge for prescription drugs. It is hoped that these rules will save two billion euro for the health insurance system.

Health Minister Philipp Roesler told parliament, "This law will make the healthcare system better and fairer... I'd have preferred bigger steps. But small steps forward are better than big steps backwards."

The Netherlands
Compulsory ePrescribing by 2012

Inspector General of the Dutch Healthcare Inspectorate, Prof. Gerrit van der Wal, has announced that from 1 January 2012 all drug prescribers must have made the switch to an electronic prescription system.

Prof. dr. van der Wal declared, "It is very risky to prescribe drugs without the help of an automated system that instantly signals drug interactions and possible allergic reactions. This is unnecessarily dangerous and no longer justified. Therefore, inspections will start from 1 January 2012."

There are currently too many errors being made in the dispensing of medication. It is believed that these errors could be significantly reduced with the use of an eprescribing system. As of January 2011, a guideline on the transfer of medication data formulated by the healthcare sector will be enforced.

Denmark
Use of Telemedicine Between Hospitals in Denmark

A pilot project has been made between Copenhagen University Hospital and Bornholm Hospital, which is a small hospital on the Danish island, Bornholm, located in the Baltic Sea.

The purpose of this health technology assessment was to test outpatient follow-up of patients using telemedicine for the first time in Denmark. This was applied in the categories of patients that do not require physical examination and for which telemedicine enables outpatient follow-up to be carried out in their community.

The pilot project focused on two selected groups of patients who live in Bornholm:

- Patients referred for surgery for knee and hip prostheses at Copenhagen University Hospital in need of preliminary investigation or subsequent follow-up, and
- Patients in Bornholm referred for echocardiography by their general practitioners.

The use of telemedicine in connection with echocardiography and preliminary investigations and follow-up for patients getting knee and hip prostheses was successful overall. The patients experienced improvements in both convenience and time saved since they did not have to travel to Copenhagen University Hospital. Similarly, economic costs are reduced considerably by reducing the number of patient trips. This reduction means that the use of telemedicine has produced an overall economic benefit in the six months during which the number of telemedicine consultations was registered in connection with this pilot project.

Further information about the pilot project contact Asger Hansen, asgerconny@mail.dk

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COMMISSION ADDRESSES KEY ISSUES IN NUCLEAR MEDICINE, RADIOLOGY AND RADIOTHERAPY

The European Commission has adopted a Communication to the European Parliament and to the Council on medical applications of ionising radiation. It proposes a way forward to resolve the urgent issue of shortage of supply of radioisotopes for nuclear medicine. The Communication also identifies key issues to improve radiation protection of patients and medical staff, to avoid a rise in population exposure associated with the technological advances in x-ray computed tomography imaging (CT) and an increase of accidental or unintended exposures in radiotherapy. This Communication was jointly proposed by Günther Oettinger, Commissioner responsible for Energy, and by John Dalli, Commissioner responsible for Health and Consumer Policy.

- Energy Commissioner Günther Oettinger said: "Nuclear medicine is essential for diagnosis and treatment of serious diseases like cancer, cardiovascular and brain diseases. At the same time, the overall population exposure to ionising radiation due to medical procedures overwhelms any other man-made exposure."
- Commissioner for Health and Consumer Policy John Dalli added that: "The shortage of radio-isotopes needed for medical procedures as well as the need to improve patient and health professionals' protection against accidental or unintended exposures in radiotherapy, are important objectives of public health policy."

All over the world, the number of x-ray examinations is around four billion per year. In Europe, around nine million patients are treated each year with radioisotopes. It is the Commission's responsibility to help secure the availability of this technology to the benefit of human health. Today, the most widely used diagnostic radioisotope, Technetium-99m, is in short supply because it relies on an unsustainably low number of production reactors. Within the overall nuclear energy policy of the European Commission it is of crucial importance to provide incentives for further research reactors to contribute to its production and in the long-term for new research reactors to be built for this purpose.

The Communication proposes a long-term perspective on the medical application of ionising radiation in the Union to stimulate discussions on the necessary actions, resources and distribution of responsibilities.

Actions to Strengthen Regulatory Framework

The following actions are proposed:

- Strengthen the existing regulatory framework: The current legislation (Directive 97/43/Euratom) will be upgraded to enhance regulatory supervision to ensure that the legal requirements are respected. This will be part of an overall consolidation of radiation protection legislation in 2011.
- Raise awareness and safety culture: The medical profession must receive adequate training and regular updates on good practice, and above all, made sensitive to its responsibility in ensuring both good medical care and adequate radiation protection. Awareness also needs to be raised among patients and among the general population.
- Foster radiation protection and a sustainable supply and use of radioisotopes through research: Actions within the Euratom and EU Framework Programmes and in the framework of the Sustainable Nuclear Energy Technology Platform (SNETP) should contribute to the improvement of radiation protection and to the development of research infrastructures and competences.
- Financing mechanisms to ensure sustainable supply of radioisotopes: The Commission assesses different financing mechanisms to ensure a sustainable supply of radioisotopes in the interest of public health.
- Integration of policies: Medical applications of ionising radiation call for good integration of different policies, on public health, research, trade and industry as well as radiation protection.
- International cooperation: The World Health Organisation (WHO) is very active in this area and the International Atomic Energy Agency (IAEA) has built up important programmes and information tools. The Commission will support all initiatives for coordinated efforts.

Further Reading

The following documents "The Communication on medical applications of ionising radiation and security of supply of radioisotopes for nuclear medicine", and "Commission staff working paper with annexes to this Communication" are available on the website: **http://ec.europa.eu/energy/nuclear/radiation_protection/radiation_protection_en.htm**

New, non-surgical treatment for uterine fibroids
A patient friendly alternative

High Intensity Focused Ultrasound (HIFU) has long been known as a non-invasive therapy technique. It uses focused ultrasound waves to heat and coagulate tissue deep inside the body without damaging intervening tissue. However, the lack of a suitable guidance and monitoring technique and long treatment times has prevented its widespread medical use.

The perfect combination

With Sonalleve MR-HIFU, Philips now presents a system that enables exciting emerging non-invasive therapies. It brings the advantages of two modalities together by integrating an advanced High Intensity Focused Ultrasound system into the patient table of the Philips Achieva MR system.

Focused ultrasound

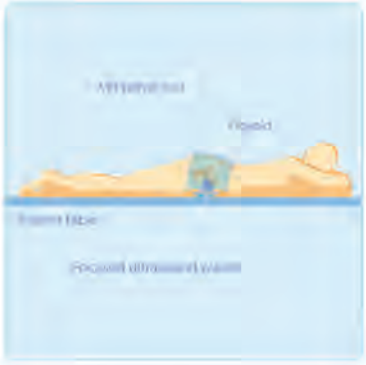
With High Intensity Focused Ultrasound therapy, a focused transducer is used to bundle ultrasound energy into a small volume at the target locations inside the body. During treatment, the ultrasound energy beam penetrates through the skin and soft tissue causing localized high temperatures only in the focus area, leaving the skin and intermediate tissue unharmed. Within a few seconds this produces a well-defined region of coagulative necrosis.

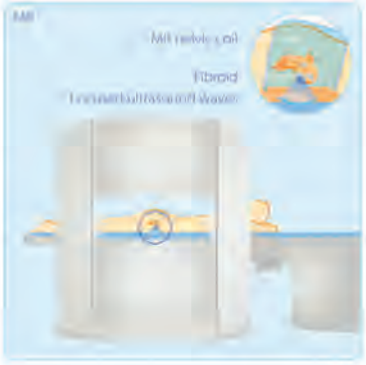
Combined with MR image guidance

3D anatomical images provide the reference data for treatment planning, while real-time temperature sensitive images follow the ablation process to provide information about treatment progress and monitor critical anatomical structures.

Ablation of uterine fibroids

Uterine fibroids are the most common benign tumors in pre-menopausal women. Fibroids occur in 20 to 50% of women of child-bearing age, and with increasing size produce pain, excessive menstrual bleeding, pressure, bloating and urinary and bowel compression symptoms. Fibroids may also cause infertility. Many women suffer from uterine fibroids but don't want to undergo surgery and continue to endure the condition in silence. Philips' new Sonalleve MR-HIFU system now offers a non-invasive treatment of uterine fibroids. The technique is much more convenient and comfortable than other therapeutic procedures such as hysterectomy, myomectomy or uterine artery embolization. These require hospital admission as an in-patient and sometimes weeks of recovery. In contrast, with Sonalleve fibroid therapy, patients can be treated as an out-patient, be out of the hospital the same day and almost fully recovered within a few days.





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ANTIBIOTICS

By Rory Watson

The Stockholm-based European Centre for Disease Prevention and Control (ECDC) is running a campaign across 36 European countries to promote prudent antibiotic use in hospitals.

The move to ensure the application of best practice aims to reduce the number of patients – currently 400,000 annually – who suffer from infections resistant to multiple antibiotics. In Klebsiella pneumoniae, a common cause of infection among hospital patients, an emerging trend is the proportion of resistance to powerful last-line antibiotics, such as carbapenems.

Marc Sprenger, ECDC director, said: "Antibiotic resistance remains a serious threat to patient safety, reducing options for treatment and increasing lengths of hospital stay, as well as patient morbidity and mortality. We are seeing increasing multi-drug resistance and the emergence of resistance to last-line antibiotics in European hospitals which we must take urgent action to redress."

ECDC points out that up to 50% of antibiotic use in hospitals can be inappropriate due to a variety of practices. These include prescribing antibiotics when they are unnecessary; delaying their administration to critically ill patients; giving doses that are higher or lower than appropriate for a specific patient; or for too long or too short a duration. Other misuse includes overgenerous use of broad-spectrum antibiotics or incorrect application of narrow-spectrum antibiotics.

> 50% of antibiotic use in hospitals can be inappropriate due to a variety of practices

In each of the past two years, the centre has organised an European Antibiotic Awareness Day in mid-November to inform the public that antibiotics are not the solution for infections caused by viruses such as common colds and flu. With this year's emphasis on hospitals, Dr Herman Goossens, University of Antwerp, presented the initial results of research, conducted in partnership with the Institut de Veille Sanitaire in France and the Scientific Institute of Public Health in Brussels, involving 17,900 patients in 63 hospitals in 22 countries.

This found that the percentage of patients with healthcare-related infections ranged from zero to 23%. "If a hospital has 14% or more, it should look at what is going on since it could have a problem," Goossens suggested. At the same time, anti-microbial use in the hospitals surveyed ranged from almost 100% to 2%. "If a hospital has 60-70% of patients on antibiotics, it could have a problem," he warned, adding that antibiotics should only be given orally, not intravenously.

He reported back on the results of four workshops organised by the Belgian EU presidency, ECDC, European Commission and World Health Organisation in early November focusing on the antibiotic problem in hospitals. The first concentrated on emphasising the importance of hand hygiene through national and local campaigns. All European countries which are members of the WHO are being asked to sign up to its hand hygiene campaign – eight have not yet done so. The group set a target: 50% of hospitals in a region or country should fill in the WHO self assessment framework by 5 May 2011.

It was also suggested that the European Commission should support research on hand hygiene campaigns to determine their effectiveness in reducing infection rates and provide material tailored to the specific circumstances in individual member states. The Commission immediately took the idea on board and has promised to make some of its research funding available for the purpose next year.

The second workshop concentrated on hospital indicators and antibiotic management. Goossens acknowledged that mandatory public reporting and publication of indicators on processes, outcomes and structures, as in the UK and France, but not in many other countries, was a controversial issue. But he suggested this was a debate that should be addressed and also revealed that in Belgium each hospital has an antibiotic management team that is funded by the government.

The third group examined the creation of common European methodology on healthcare associated infections and the early findings from 63 hospitals presented above. The final workshop considered infection prevention and prudent use of microbial agents in long-term care facilities. This noted that as the elderly population increases in size, it is more at risk of infection. In some nursing homes antibiotic use is at 20% or higher – a level which Goossens describes as "unacceptable".

The ECDC notes that multifaceted strategies can help to ensure prudent antibiotic use. It advises continuous education of prescribers and specialists; use of evidence-based hospital antibiotic guidelines and policies; and close monitoring of hospital antibiotic resistance and antibiotic use data to guide empiric antibiotic therapy in severely ill patients. It also recommends taking microbiological samples before initiating empiric antibiotic therapy, monitoring culture results and streamlining antibiotic treatment based on the culture results.

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MANAGING THE AH1N1 CRISIS

The Mexican Experience

By Gilberto Felipe Vazquez de Anda

When the first cases of AH1N1 appeared in Mexico, the world watched as Mexican hospitals worked to get the crisis under control. The huge influx of patients meant strains on staff and resources. At the same time, the general public was beginning to panic. This article details how hospitals coped with the first wave of influenza and how they prepared for the anticipated, stronger, second wave of the virus.

The influenza outbreak observed during 2009 in several cities of Mexico affected the fragile intensive care system and the health system in general. During the first wave, our highly demanded intensive care units (ICUs), nearly always full of patients, were under further demand from patients suffering from the epidemic. In hospitals, especially within ICUs and ERs, there were insufficient supplies to attend to the increasing number of patients with flu and there was a lack of diagnostic tests and antiviral treatments.

Our primary concern at that time was the knowledge that there were not enough ventilators available for all patients who would require ventilatory support. Additionally, there were concerns regarding the health workers who were highly exposed to the virus. ICUs were not designed with negative pressure rooms, doctors and nurses were not trained to attend patients with highly transmissible infections and there was a lack of proper safety equipment to protect them during patient care in the ICU. There was a high probability, given these problems, of this epidemic causing the total failure of the healthcare system.

Drastic Measures

Due to this crisis situation, we sent out a call for help to some colleagues, mainly those who had previous experience with SARS, in an attempt to get specific recommendations on appropriate measures of protection, supplies and equipment that we would require. Mexican health authorities took drastic measures to efficiently control the epidemic. On the 17th of April the Health Secretary declared an epidemiological alert for influenza, by the 24th schools and universities were closed, by the 1st of May other non-essential activities were suspended. Finally on the 6th of May, all activities were reassumed. The first wave was considered from March 23rd to May 15th and there were 2,895 confirmed cases, with a mortality rate of 2.3 percent. However, the mortality rate in wards and the ICU reached 41 percent. During this period of the outbreak there was an overwhelming feeling of fear and hopeless when patients crowded the ER and there were mass transfers into ICUs.

Life changed in Mexico, as did the way of treating community-acquired pneumonia in the ICU. The challenge was to control our procedures in preparation for a biological crisis in the ICU through an effective action plan. The Secretary of Health, together with a multidisciplinary team, worked to map out directives on the minimum equipment and supplies required for ICUs to guarantee medical attention for severely ill patients under these extreme circumstances.

Raising Awareness

News of the spread of influenza was heavily reported in the media, there was a national awareness about the risk of a new hit of influenza AH1N1 and for that reason there was a nationwide campaign to show the population how to act in case of an epidemic, and how to prevent transmission. An important media campaign was run to make the population aware of the symptoms of influenza AH1N1 and to recommend more rapid medical attention in case of flu symptoms. Authorities in every level of the health system worked to promote sanitary measures such as hand washing, covering the nose mouth while sneezing and vaccination campaigns. There was a national campaign for immunisation with influenza vaccines and an important investment in equipment to protect healthcare workers (glasses, N95 masks, globes, and gowns) (figure 1).

Specific clinical guidelines to standardise admission and treatment in the ICU were distributed to ICUs in both public and private hospitals (www.salud.gob.mx). There was an intense activity nationwide with numerous educational meetings regarding influenza AH1N1. Symposia, forums, expert meetings, videoconferences, mechanical ventilation workshops were organised across Mexico.

Controlling the Situation

Healthcare institutions formed special teams to take control of the situation. According to the demand for medical attention, hospitals designed a specific triage system to identify patients with flu and every new case of influenza was notified to the Federal Health Secretary. Specific processes for medical attention were redesigned in every emergency department, ICU and hospitalisation ward to manage these highly demanded services. There were specific areas in the wards to concentrate patients with influenza.

Innovative strategies to attend patients during the pandemic were observed such as the use of telepresence with robots at suburban hospitals. The intention of the programme was to cover more hospitals with specialised physicians. The telepresence programme, using robots directed by remote control via wireless internet, was used for the first time in a biological crisis. This novel programme assisted three suburban hospitals in the State of Mexico, acute care facilities including emergency room, ICUs, and isolated areas for influenza. This programme showed that it is feasible to provide assistance from highly specialised physicians to distant communities during an outbreak of influenza. Also, a specific supply chain for antivirals, vaccines, safety equipment was designed for the network of hospitals.

The Second Wave

As expected, the magnitude of the second hit of the outbreak of Influenza AH1N1 was harder than the spring outbreak. Despite preparation for this second hit, ICUs and wards designed for influenza patients were over-subscribed, including those located in suburban cities. However, the health system was better prepared and the action plan worked in most hospitals. ICU patients were treated according to the recommendations made by the panel of experts. The ICUs were occupied with infected patients and specific areas of hospitals were isolated to receive patients with moderate symptoms. According to epidemiological reports in Mexico during the outbreak, the acute respiratory distress syndrome (ARDS) was very aggressive and patients were mechanically ventilated with high needs of airway pressures and FiO2. For that reason there was an important investment in mechanical ventilators to cover the expected demand and acquisition of equipment for special treatment of ARDS like High Frequency Oscillatory Ventilators (HFOV) and Extracorporeal Membrane Oxygenators (ECMO) (Figure 2).

Conclusion

One year after the experience of our first biological epidemic, we feel that Mexico is closing the cycle. The swine flu pandemic was less aggressive than expected; the number of people that died was relatively low compared with the much higher number of infected people. Perhaps such unexpected low mortality was due to a good response to the challenge of a pandemic. The use of telecommunications, news, research, knowledge of epidemics, biotechnology and better equipment in ICUs, antibiotics, antiviral, vaccines, mechanical ventilators, and the importance of being prepared for disaster, might have been the strongest contributors to such a low mortality rate.

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Figure 1. Nurses team at the ICU after a night-shift during the pandemic of influenza AH1N1 in Mexico.

Figure 2. Patient with ARDS treated with prolonged life support device (ECMO) and high frequency oscillatory ventilator during the pandemic of influenza AH1N1 in Mexico.

COPING WITH THE UNEXPECTED

How an Irish Hospital Handled the Volcanic Ash Cloud Crisis

By Lee Campbell

When Eyjafjallajökull, the Icelandic volcano erupted on March 21st of this year it was surprisingly Europe that was disturbed the most and not Iceland. The spewing cloud of ash caused fewer problems for Iceland in comparison to the havoc it reeked on European air travel. At first thought any effects of volcanic ash on the healthcare sector would be health risks but there was in fact a more pressing problem: nuclear medicine.

The week of the 19th of April saw the use of nuclear medicine screech to a halt in Ireland affecting management and staff and more importantly patients and their families. I spoke to Fionnuala Barker from St. Luke's hospital in Dublin to find out how her department coped with this crisis and what they have learnt from the experience.

So why did nuclear medicine shut down with the airports? Ms. Barker explained that most of the radioactive technetium used for bone scans and day-to-day nuclear medicine is shipped into Ireland from the continent via either France or Holland. Deliveries normally take place over the weekend, having the material ready for patients on Monday. The technetium is usually dispatched from the manufacturers on a Friday evening, arrives in Ireland on the Saturday morning and dispatched to the hospitals over the weekend. As the airports closed on the 17th of April no deliveries could be made.

Airspace Closed

Barker stressed that missing a weekend delivery due to circumstances such as severe fog closing an airport is not a problem; the delivery can be made another day. The real issue was the fact that the airports remained shut during the week, or were reopened and closed again meaning that most nuclear medicine departments did not receive their deliveries for the whole week. This lead to the cancelling and rescheduling of appointments with the amount of disruption depending on the workload. The consequences of the ash cloud crisis were different for each hospital, depending on the size of nuclear medicine department.

At St. Luke's, the nuclear medicine department only takes patients from their hospital resulting in a smaller workload than a larger department. They were able to successfully accommodate patients whose appointments were cancelled within two to three weeks. This would have been a problem for larger departments.

Just a few weeks after the ash cloud crisis had been resolved and deliveries returned to their usual schedule another problem arose; this time, disruptions to generator supplies. Hospitals already rescheduling patients due to the closure of the airports were forced to contend with a lack of technetium meaning rescheduling some patients for a second time. In this case, St. Luke's was lucky, having already returned to a normal schedule.

Time Sensitive Material

The delivery and use of radioactive material such as technetium is extremely time sensitive, a strict schedule must be adhered to. For St. Luke's, the material comes from Petten in Holland, close to the Belgian border. The technetium leaves the factory around four pm on Friday and travels by road to Brussels. From there it is forwarded on cargo flights via the East Midlands in the UK. Arriving there at one or two am, it is then shipped by another cargo flight to Dublin arriving at five or six am. So the initial disruption began in Brussels but the complications do not end there. The problem with radioactive materials for nuclear medicine is that they cannot be stockpiled; this week's material is made specifically for this week. Ms Barker explained that, "if you don't use it, it won't be there next week, it will have decayed. The technetium that we prepare to use that day has to be used that day, it looses 10 percent of its radioactivity per hour." To use it the following day means topping it up.

Nuclear medicine deals with time sensitive material that must be ordered in advance. Most departments in Ireland will only receive one delivery per week and this has been ordered specifically according to the schedule. For specific nuclear medicine therapies you would order a specific therapeutic amount for a specific patient on a specific day. To illustrate this key point Barker used the example of radioactive iodine used to treat thyroid cancer patients (patients she was treating during the week of the ash cloud crisis),

"If I order radioactive iodine to treat a patient today, and I can't treat that patient today there will be roughly 10 percent less tomorrow and unless the medical consultant who is looking after the patient agrees to treat with 10 percent less then you have to try and get extra in to top it up". But this must be ordered, made, and delivered from Holland meaning up to a 48-hour wait, again impossible if the airports are closed.

Juggling Patients to Keep to the Schedule

This crisis was not really something hospitals expected or could prepare for. Fog or other disruptions to air travel are unlikely to have the same impact as a complete closure of the European fly zone so already established contingency plans were not adequate. St. Luke's did not have a contingency plan in place but managed to juggle their patients successfully and avoid a scheduling nightmare.

Again using the example of thyroid cancer patients, Ms. Barker explained that the department has two iodine treatment rooms so two patients can be treated at the same time. This was the plan for the week of the 19th of April. These treatments are scheduled six weeks in advance as patients must stop taking their regular drugs at certain intervals, one drug four

weeks before and another two weeks before. This adds a certain urgency to the situation, patients cannot be kept off their drugs for too long and so if they cannot be treated that week, it would need to be the following week.

Ms. Barker explained that the weekend treatment of these two patients was essential, "If we hadn't have been able to treat those patients we would have had a dilemma." Patients were already scheduled until the end of June and pushing each appointment back is simply not feasible. Many patients have particular situations, some have already arranged childcare for the three weeks after their treatment.

> If I order radioactive iodine to treat a patient today, and I can't treat that patient today there will be roughly 10 percent less tomorrow

The two patients were due to start treatment on the Tuesday, with their radioactive iodine arriving on the Monday morning but this was not delivered because of the volcanic ash cloud. Ms. Barker explained that they hoped for a delivery everyday but to no avail. This was upsetting for the patients, one of whom decided to go home until the iodine was delivered while the other waited in hospital. After putting increasing pressure on the suppliers St. Luke's did manage to have the material delivered on the Friday. This was a specific delivery solely for these two patients. Treatment took place on the Friday afternoon, three days late with the patients staying in the hospital over the weekend and being discharged on Sunday afternoon. In order to keep to the prearranged schedule for the following week, one of the rooms was cleaned and decontaminated on the Sunday evening, the second the next morning allowing the next week's patients to be admitted as normal on Monday afternoon.

Lessons Learnt

A few weeks after the crisis ended Ms. Barker wrote a report for the Chief Executive suggesting the creation of an emergency group to meet if the situation should arise again. This was approved and a group made up of medics, nurses and other staff was created with the remit to meet urgently if a similar crisis occurs. The group will prioritise patients in terms of medical urgency and then allocate someone to contact them and reschedule them all. The group will examine all the parameters as the key facet of this particular crisis is the uncertainity, "We didn't know from one day to the next whether we would get any supply or not and that's the biggest issue."

The HSE Reaction

The HSE's (Health Service Executive) National Crisis Management team periodically met during the ash cloud emergency to consider the impact on the HSE of this event and any actions required. We also participated in the Government Task Force which meet throughout this crisis and played a significant role in one of the sub-groups of the Government Task Force set up at the time to consider the impact on the population and the environment of deposition of ash.

The main impact on the HSE of the Ash Cloud were:

- Ensuring timely and accurate advice was available to the public on the effects of ash concentrations in the air;
- Key workers stranded abroad; and
- Air ambulance transport of transplant patients and organs.

Gavin Maguire,
Head of Emergency Management, HSE

Part of a Wider Problem

Although St. Luke's may have a contingency plan should a similar situation arise there is still an uncertainty surrounding the supply of material for nuclear medicine. Dervla Gleeson delves further into this topic in our medtech section (pg. 35). There is a shortage of molybdenum, which is the particular isotope used to make technetium generators, the main isotope used for imaging and nuclear medicine. Why is there a shortage? The problem is there are only five generators in the world that make it and most are over 40 years old. The Canadian authorities were forced to shut down their reactor due to safety issues meaning the other four reactors had to re-arrange their schedule to provide enough medical isotopes.

Preventative maintenance like this is important as should all the reactors break down there would be no supply for nuclear medicine. Ms. Barker explained that at one point during the year there were only two reactors in operation, this reducing to one over a short period. There is now a new reactor in Poland but there are still very few generators and most are not commercial businesses but research institutions, the production of molybdenum not being their core business.

Moreover, research and support for nuclear reactors is not high on the political agenda like it was in the 50s and 60s. There is a clear anti-nuclear stance especially considering the growing concern over greenhouse gases and global warming. Both the European Union and the producers and suppliers of radiopharmaceuticals have set up groups since this crisis began to cooperate and maximise supply. Building a new reactor is not an immediate solution as it could take between five and ten years to be fully operational. At the minute medical isotopes are relatively inexpensive but this is only set to change with bigger, high-tech imaging departments and the dwindling of supplies.

Conclusions

From the Irish experience it is clear that planning is key to the successfully managing a crisis of this kind. At St. Luke's an all-out crisis was avoided by successfully juggling patients to keep to the schedule and by pressuring suppliers into making extra deliveries. This crisis has highlighted the need for communication between management and medical staff and also the wider issue of continuing the supply of radiopharmaceuticals.

HOSPITAL DISASTER RESPONSE: ARE YOU REALLY PREPARED?

By Mike Clumpner and Jim Mobley

Is your hospital prepared for the next disaster? This article is designed to generate discussion into the adequacy of your hospital's current emergency response plan. Hours upon hours of work go into creating a hospital's emergency response plan that is designed to respond to a myriad of disasters. As with any large-scale plan, it may appear flawless on paper, but may fall well short during actual performance. To paraphrase a famous quote, every battle plan works perfectly until first engagement. This article is designed to review some of the basics of hospital disaster plans, and offer topics for hospital administrative personnel to discuss with their staff.

In the United States, there has been a large emphasis placed on disaster response training since 2001. Following September 11th 2001, hospitals everywhere reviewed their disaster response plans to include scenarios that seemed so unthinkable that they once would only be thought of as a plot in a Hollywood movie. Disaster plans must now address situations such as state-sponsored terrorism, weapons of mass destruction including chemical, biological radiological, nuclear and explosive agents, and cyber terrorism. In 2005, Hurricane Katrina struck the United States Gulf Coast and severely tested hospital disaster plans. Katrina proved that many hospitals in fact could handle a large-scale disaster, but only for an extremely short period of time. Most hospital disaster plans assumed that help would arrive within 12-24 hours following the incident. Katrina showed that help could be days, if not weeks away.

Disasters are not just limited to the United States. The reported frequency of mass casualty disaster incidents has increased significantly over the past 50 years. In the last ten years, over two billion people worldwide have been affected by disasters (Campbell 2005).

Since 2002, many hospitals have made dramatic strides towards increasing their ability to respond to disasters. However, a recent report from the Center of Biosecurity states "The nation's healthcare system still remains largely unprepared to respond to large-scale catastrophic emergencies" (Toner et al. 2009).

A research study conducted by the United States Department of Health and Human Services Agency for Healthcare Research and Quality assessed hospital training and mock responses to mass casualty incidents. Their research found several key points that were common to most all hospitals:

- Internal and external communications are the key to effective disaster response;
- There must be a well-defined incident command centre to reduce confusion;
- Conference calls are an inefficient way to manage disaster response; and
- An accurate and frequently updated list of phone numbers for key personnel is essential (Hsu et al. 2004).

All Hazards Planning

An all hazards plan is an integrated planning approach to any realistic threat to an organisation including natural disasters, terrorist attacks, and any other incidents that could threaten the operational capacity of a hospital. When an all hazards plan is produced, it needs to address the following:

- **Preparedness**
  - Development of plan and procedures
  - Increase response capabilities
- **Incident mitigation and response**
  - Sustaining critical mission operations
  - Protection of personnel
- **Recovery**
  - Restoration of organisational functions

How up to date is your all hazards plan? Does it address current threats? One of the most devastating threats will arrive with very little fanfare. A cyber attack on a critical government infrastructure can absolutely cripple a community. We have become so dependent on computers that they affect almost every facet of our lives. How dependent on computers is your facility? What kind of impact would there be if you could not use a computer for an hour, a day, or a week? Does your disaster plan prepare for cyber attacks on your facility? This is a very realistic threat with a high level of operational impact that must be considered.

Communication

The Achilles' heel of disaster management has historically been communication. Hospitals need to have multiple redundancies built into their communication plan. When performing a basic critical infrastructure vulnerability analysis, communication is frequently one of the most critical vulnerabilities. Hospitals have to work in tandem with local communication providers to harden the communication infrastructure. Does your hospital all hazards plan take into account a complete and total communications failure? Imagine the potential for destruction if a terrorist organisation could eliminate all phone, Internet and intranet communication at your facility! Most hospitals have gone to a total paperless system for charting, ordering procedures, and countless other treatment modalities. Loss of communication in any infrastructure can prove to be crippling. Although almost every hospital would be severely hampered by losing communication, would your facility be able to compensate? One of the greatest hurdles faced in the first 24 – 48 hours following Hurricane Katrina was the inability to communicate to any outside agency. Every hospital in essence became an island for several days. Is your hospital prepared to be completely self-

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sufficient for at least 48 – 72 hours? Do you maintain a stockpile of the paper forms that you hospital used before going paperless? These forms may prove absolutely invaluable if there was a total loss of computer communication.

Security

Security is a vital link in disaster response. If your emergency department has four shooting victims arrive from a gang shooting, do you automatically "lock down" the emergency department? How difficult is it just to secure your emergency department? Does your facility have the ability to completely secure every entrance? How big is your security force? Historical data has shown that the majority of patients from a large-scale event will self-transport to the closest hospital. Along with the concern of a large influx of patients, the United States Center for Disease Control has found several problems for hospitals that are common when patients self transport from a mass casualty scene.

If a major event happened blocks from your hospital, would you be able to completely lock down your hospital and prepare for the onslaught of patients? If there was an incident at an elementary school which numerous injured children, could your hospital handle the influx of worried parents? How many security officers would it take to secure every entrance at your facility? If you gave the orders right now to lock down your hospital, how long would it take? Could you secure your facility within five minutes? Odds are, in a real event, you will have less than five minutes after notification to prepare for the onslaught of patients.

Security is vital in protecting the facility from the rush of injured patients and the "worried well", but could your hospital actually be a target of terrorist activity? The attacks by the Al-Qaeda trained Chechens in Georgia have shown that hospitals are often considered as targets by terrorists. Chechen rebels have attacked hospitals both as primary and secondary targets. What better way to completely decimate a community then to injure people and destroy the place where they would be treated?

One of the biggest threats is also one of the hardest to protect against. The use of car bombs has proven an effective weapon that is difficult to prevent. Most hospitals are designed to allow for vehicles to pull up close to the building to facilitate loading and unloading passengers. How easy would it be for a car bomb to pull into your emergency department? Odds are, they would be able to park within 20 feet of the entrance to your facility. More and more high-threat buildings being built are having counter-measures designed and installed to deter car bombs. Unfortunately, convenience is the price that is paid for increased security to minimise this threat.

Decontamination

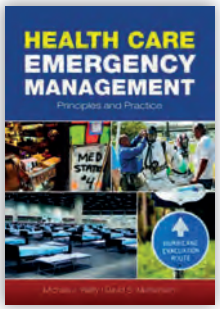
When was the last time that your staff unpacked all of the patient decontamination equipment and practiced with it? We have had the opportunity to teach disaster decontamination at several hospitals. It is always disheartening to see staff open up equipment that is several years old and still in the original package. Our history has shown us that over half of the participants in these disaster preparation classes have never seen their hospital's decontamination equipment prior to the class. However, each of the participants in the class was already assigned an active role in their hospital's disaster response plan.

All personnel who have an active role in the disaster plan that is outside of their normal daily duties should have routine training. The complexity of their role should dictate the frequency of their training. Personnel who have a complex role (i.e. patient decontamination) should train at least quarterly on their duties. At Spartanburg Regional Medical Center in Spartanburg, South Carolina (United States), the hospital emergency response team (HERT) is comprised of personnel from all disciplines. These personnel train often and are ready to respond

***Books** in Review

Health Care Emergency Management: Principles and Practice

Michael J. Reilly, David S. Markenson / Jones & Bartlett Learning, 2009



Recent research underscores a serious lack of preparedness among hospitals nationwide and a dearth of credible educational programmes and resources on hospital emergency preparedness. Health Care Emergency Management: Principles and Practice specifically addresses hospital and health system preparedness in the face of a large-scale disaster or other emergency.

Administrators, emergency preparedness coordinators, and clinical staff who are charged with managing preparedness and emergency management functions for hospitals or healthcare systems can use this guide in planning for disasters, terrorism, and public health emergencies. Health Care Emergency Management is also ideal reference text for emergency preparedness courses in health administration or public health programmes. Through case studies and practical examples, this book engages the reader in active learning about this exciting, challenging, and rewarding field.

Topics covered include:

- Principles of emergency management for healthcare (incident preparedness, legal issues, hospital preparedness plans);
- Hospital workforce issues (education, management of volunteers);
- Hospital operations during disasters and emergencies (planning, risk communication, media relations); and
- Clinical considerations (triage, managing infectious diseases).

at a moment's notice to threats to the facility of any level.

Surge Capacity

Surge capacity is the hospital's ability to rapidly expand services in order to accommodate an unanticipated influx of patients in the event of a large-scale event. Hospitals throughout the world are faced with daily staffing shortages. In many places, hospital personnel are already providing care at sub-optimal patient care ratios. Hospitals are staffed based on daily, anticipated capacity, not for the unusual. A study of hospitals in the Los Angeles, California (United States) area found that out of 45 area hospitals, almost all operated all constant full capacity with very little ability to handle surge capacity.

To stress this point, the problem of "patient parking" has become more common in the United States. Patient parking occurs when an emergency department is too full to accept a patient, and does not allow the ambulance to offload the patient, but instead requires the crew to wait with the patient until a bed is available. Patient parking has resulted at times, in an ambulance waiting hours with patients for a bed to become free. This obviously has a massive negative impact on the abilities of the ambulance service.

What is your daily surge capacity at your facility? Do you share information each day with other local hospitals to see the availability of beds in the event of a large disaster? If you do not want to share this information with competing hospitals, do you send the information to a neutral third party such as the emergency services provider? The person(s) in the community with the responsibility to manage disaster must have bed capacity information provided to them daily.

Evidence-based disaster medicine shows that for every patient who arrives to the hospital with physical injuries, five more will arrive with psychological injuries (Hankins 2009). Most patients will self-present at the hospital within one hour of the incident.

The optimal method for predicting and preparing for hospital surge capacity is not yet known. However, hospitals should strive to prepare for a myriad of incidents that can occur in their community that would produce multiple patients. It is also hard to predict the disaster that may exhaust specific resources such as surgical suites, ventilators, or burn beds. Literature from previous mass casualty disasters shows that the majority of patients will be discharged from the hospital within 24 – 72 hours following admission (Einav-Bromiker and Schecter 2009).

Reliability on External Resources

When we have provided disaster training, we have had the opportunity to review multiple hospital disaster plans. An all hazard plan that relies on outside agencies or resources to mitigate a disaster is a set up for failure. Many hospitals are under the false impression that the local emergency services agency will be able to assist with patient decontamination in the event of a large incident. If there is a large hazardous materials incident, the emergency service's primary obligation is to mitigate the incident. Fire department and ambulance resources cannot be dedicated to assisting hospitals with decontamination. If resources are available, emergency service agencies would be more than willing to assist, but they cannot be counted on in the disaster plan. Hospitals must be as self-sufficient as possible, and designed to operate for at least seven days before receiving outside help.

Relationships

When a hospital or community suffers from a disaster, it is imperative that in addition to being self-sufficient, they must also have a working relationship with other facilities in the area. These relationships may be with direct competitors and facilities that are not typically encountered on a daily basis. By developing relationships in advance of a disaster, the call for assistance made by your hospital in the event of disaster will not be made to a stranger. It has been proven time and time again that relationships forged in advance of a disaster can pay dividends in the event of an actual disaster.

Disaster Drills

The Joint Commission on Accreditation of Healthcare Organisations (JCAHO) requires all hospitals in the United States to test their emergency plan twice a year, including one community-wide drill. The authors recently were involved as instructors in a large community disaster drill. Every hospital in the community was asked to participate in the drill. It was rather disheartening to hear several of the hospitals decline to participate in the drill with each offering the same excuse: "We are understaffed. We can't afford to send anyone to the drill, nor can any of the mock patients come to our facility." What better way to test your ability to respond to a disaster then when you are already short staffed! Disaster drills should be realistic as possible, and under-staffed hospitals are a very realistic issue!

Conclusion

In closing, disaster planning should encompass all legitimate threats. Hospitals must consider the possibility of being a primary target in terrorist operations. In order to limit the impact of a large-scale disaster, hospitals must have multiple systems of redundancy to back up their critical infrastructures. Hospitals must also limit their reliance on outside agencies to provide support during disasters. Ideally, hospitals should be completely self-sufficient for a minimum of seven days. Hospitals must routinely train and drill participants on their roles and responsibilities in a disaster. By emphasising these core components of disaster management, hospitals minimise the impact to their operational abilities during a large-scale disaster.

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COMPLAINT **MANAGEMENT**

Improving Quality of Care and Patient Satisfaction

By Judith Polat-Firtinger

Complaint management systems are a great way for hospitals to analyse patient satisfaction. Collecting and handling complaints, and receiving positive and negative feedback hospitals allow hospitals to analyse patient satisfaction and improve quality of the care they provide. The Hospital Association of Vienna developed a concept for standardised complaint management in 2003, putting it into practice in 2005.

In comparison to complaint management systems in general companies, it is not only important for hospitals to collect and handle complaints but also to get positive and negative feedback. This feedback allows for the analysis of patient satisfaction. The patient satisfaction rating in this service sector is always subjective, it is not about facts and figures but opinions and perceptions. Positive feedback from patients and their families also advances employee motivation.

The Hospital Association of Vienna installed an IT programme to collect and evaluate all patient feedback– positive and negative.

Aims

The general aim of the new complaint management system is to improve customer satisfaction. It is all about minimising the negative experiences in the hospital, being aware of the fragility of the business and improving the medical treatment of patients.

The first essential tool for an efficient complaint management system is an easily accessible way to complain. The hospital association of Vienna accepts oral and written complaints, complaints via telephone and via email. The patient can choose whichever method they prefer. Every feedback, regardless if positive or negative, is collected and taken into account for evaluation.

A few supporting measures have also been used such as the Internet and print media to inform the patient of the complaint procedure (e.g. a company-wide PR campaign).

The Process

Acceptance of Complaints

The Hospital Association of Vienna follows the complaint ownership principle. The employee, who is first informed about a complaint or problem by a patient/customer, is the "owner" of this complaint. The "owner" has the task of taking care of the complaint and, if it is within their sphere of competence, to solve the problem. If not, the complaint must be passed on to a colleague, with appropriate decision-making authority.

For certain situations, patients or relatives may not want to contact employees involved in the situation. It may be unpleasant for patients to talk directly with the staff member involved, or there might be difficulties explaining their complaint or being understood. Therefore, in every hospital a complaint department is set up, providing an alternative way to make a complaint. There is a direct link between this department and the upper echelons of hospital management as complaint management is of utmost importance in the hospital.

Handling of Complaints

The duties of the employees of the complaint departments are to accept complaints, collect the important data and to pass the complaint to colleagues, who have decision-making authority. Furthermore, they have to gather the following information:

- Why is the customer unsatisfied?
- Where and when did the problem occur?
- Who is involved?
- Which solution does the customer want?
- What arrangements should be made?

After collecting the relevant data, they are entered in a computing database and categorised. It is not always easy to assign a complaint to the right category. If the complaint concerns the hospital building or contents, i.e. about the quality of a patient's stay, it is easy to assign. However, if the complaint is about a medical or quality of care issue it is more complex to assign. The right categorisation of complaints is very important because the analysis of complaints can bring vital information, which can in turn improve the quality.

After acquisition of data, including categorisation, the complaints are worked on. The last step is the administrative closing of the complaint.

After telephonic, vocal or written response, the data record is completed. All steps taken during the complaint process are recorded in the computing database and the relevant papers are saved.

Reaction to the Complaint

The first contact between employees and clients concerning the acceptance of complaints is of vital importance for a satisfactory handling and solution of the complaint. Clients who want to complain may not act rationally but emotionally. In addition, being in a hospital often provokes feelings of fear and insecurity for both patients and their relatives. This is why the first contact is very important.

A discussion as to whether the complaint is legitimate or not, is neither targeted nor beneficial. Staff in the complaint management department are not allowed to evaluate if the complaint is legitimate or not.

During all communication, the customer/patient must be allowed to express themselves and finish explaining their complaints and employees must listen to them. As a general rule, if the first conversation was successful the problem can usually be resolved. Or if not resolved, this first contact will at least establish the understanding that not every problem can be solved straight away.

To conduct a conversation is not easy, especially if the situation is dominated by emotions. Employees who are in direct contact with patients have to be trained very well. Training courses for employees in the complaint management department have to be

passed regularly, because these employees have to hold long and difficult conversations with the patients and their relatives.

The processes mentioned were implemented within the complaint management department in 2005. In 2006, the complaint management department was renamed as an "Ombudsstelle". The change of name and according to this, also the shift of duties and responsibilities, have the advantage in that the ombudsmen are widely regarded as well grounded in their hospitals, more and more, they are moderators of delicate discussions.

Analysis of Complaints

Complaints and positive comments collected are analysed bi-annually.

At the end of each half-year period, a report detailing the number and type of the complaints is available for the management concerned. Based on this information, arrangements to improve quality can be planned and implemented. Meanwhile, there is enough data to compare the periods, so the effectiveness of measures can be evaluated.

The annual analysis in 2009 for negative and positive feedback shows that there is more positive than negative feedback. In 2009 there were 8,363 complaints and 10,730 positive comments.

The Anonymous Patient Survey

Patient satisfaction is predominantly measured using patient questionnaires. For 10 years now, there is a regular and anonymous postal patient survey after a patient is discharged. Patients receive a questionnaire around 10 days after their release from hospital. For the questions, there is a rating system from 1-5. In addition, the patient has the possibility of adding their own personal comments.

The returned questionnaire is recorded and then sent to the respective hospital for analysis. In the hospital, the questionnaires are gathered and the personal comments are analysed.

In 2009, 140,000 questionnaires were sent out with a return rate between 37 and 11 percent. Since 2001, the rate of return decreases each year by one or two percentage points and at the moment there is an average questionnaire return rate of 25 percent.

Analysis of Personal Comments

Within the implementation of a complaint management system the personal comments from the patient surveys, whether positive or negative, are registered, categorised and where appropriate, used to induce measures to improve quality. To use synergistic effects, patient questioning and complaint management have been connected.

It has been noted that there is a high fluctuation rate in the number of personal comments as complaints. Analysis showed that it is easier for the employees to identify complaints about the quality of the hotel services in the hospital but complaints concerning information, communication and organisation, are often not identified as such and therefore not registered.

The largest discrepancy can be found in the category "communication" with exactly 50 percent less entries identified.

Summary and Perspectives

In mid 2005, the complaint management in the Hospital Association of Vienna passed from the probationary year into routine.The figures of the collected positive and negative feedback show an efficient complaint management system.

However, the fact that the current questionnaire has been in use for the past 10 years and that return rate is slowly decreasing show that a new instrument is needed. An instrument adapted to the customer needs ensuring a more efficient collection and evaluation and also an improved adaptation of the feedback and allowing benchmarking with hospitals in other countries.

A concept for realisation of this idea has already been developed. The new form of complaint management will be used company-wide by the end of 2011. This concept will also contain a central registration of positive and negative feedback from the personal comments to ensure the continuity and quality of the input and therewith assure the quality of acquisition.

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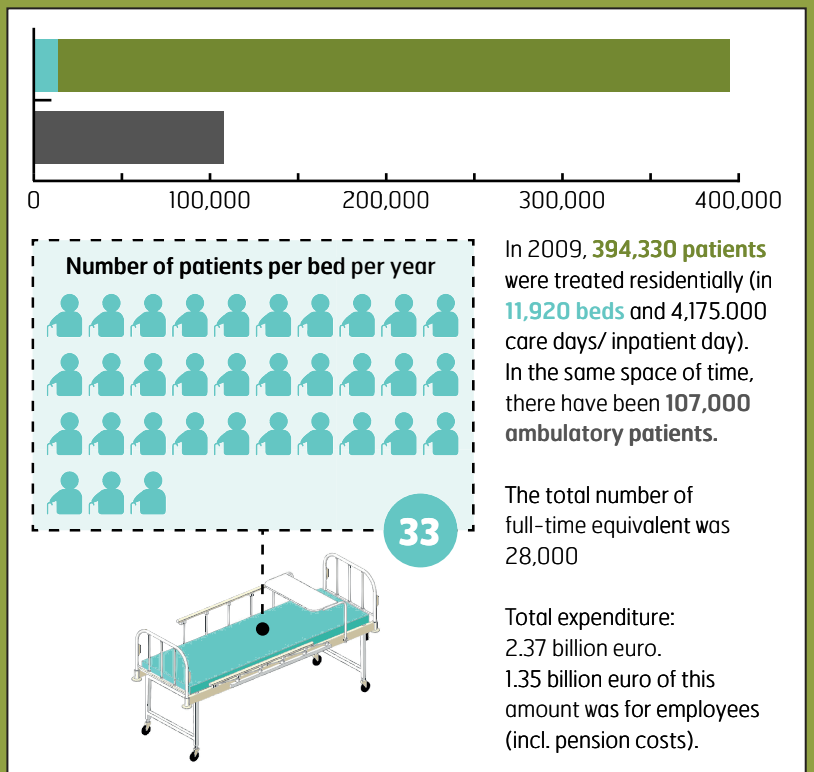
The Hospital Association of Vienna (KAV)

The Hospital Association of Vienna (KAV) includes all hospitals of Vienna, the university hospital and all geriatric centres and nursing homes.



In 2009, **394,330 patients** were treated residentially (in **11,920 beds** and 4,175.000 care days/ inpatient day). In the same space of time, there have been **107,000 ambulatory patients.**

The total number of full-time equivalent was 28,000

Total expenditure:
2.37 billion euro.
1.35 billion euro of this amount was for employees (incl. pension costs).

FINANCING **IN CRISIS**

The French Experience

By Cédric Arcos

Like their European neighbours, French public hospitals are major economic players. The principal employers of their country, principal buyers, they are also investors whose dynamism has increased in the past decade, through the movement for modernisation of buildings and hospital infrastructure (plans Hôpital 2007 and Hôpital 2012). Confronted with the need for significant liquid assets to successfully complete these projects, French hospitals did not escape the financial crisis that struck in 2008, even if their healthy financial situation prevented any long-term effects.

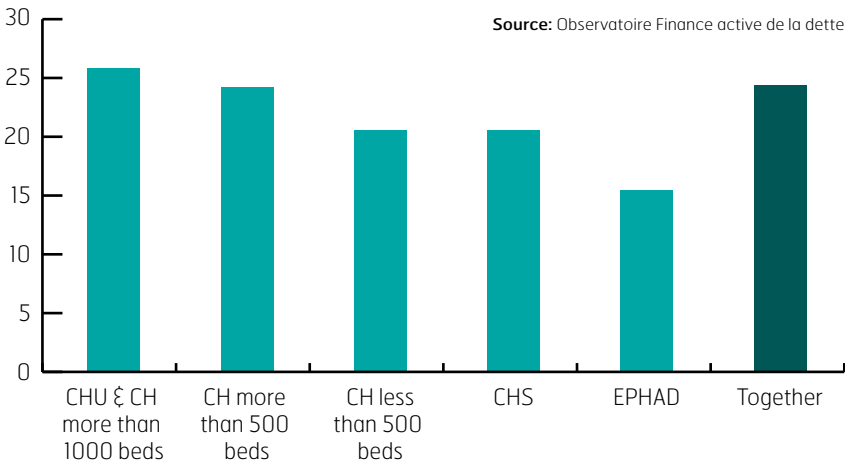
The start of the decade marked an easy access to credit for hospitals. The banks, wishing to support hospitals with their financial needs, facilitated hospitals falling into more and more debt in proposing structured loans in the form of SWAP contracts, allowing for an active management of the debt and a lessening of its cost in a favourable financial context.

When the Bubble Burst

The bursting of the financial bubble and the profound financial crisis that ensued was a real worry for hospitals. Firstly, credit became harder to come by, the banks wanted to decrease the volume of loans to improve their balance sheets and protect themselves from risks. Consequently, many hospitals were refused credit in 2008. Then margins exploded as well as inter-bank rates, which resulted in a rise in the cost of borrowing, complicating the financing of investments and lowering the duration of loans. Finally, for loans already contracted the financial crisis had the consequences of highly volatile rates and a non-neutral impact on financial costs, in particular for structured products.

Despite this rarefaction of sources of funding, French hospitals were able to overcome this crisis without major difficulties and were able to manage their financial needs thanks to their sound financial structure and low exposure to risks. Since 2009 and the end of the acute crisis, French hospitals have made stabilising their financial balances and securing their outstanding debt a priority, the majority opted for loans at a fixed rate and consolidated loans already agreed in the past.

Since 2009, hospitals have easier access to credit. Even if the banks are more strict in terms of the guarantees they demand from healthcare establishments, banking margins are still elevated, a phenomenon at the same time compensated for by the historically low guiding rates. The analysis of hospital debt illustrates an interesting evolution with, on the one hand, the pursuit of the decline of structured loans (see figure 1), and on the other hand, the decline of traditional lenders and a significant progression of alternative means of financing like the direct financing on the markets.



Source: Observatoire Finance active de la dette

Figure 1. Debt structured by segment: share of total outstanding debt

Hospitals and Banks: A New Relationship

One major effect of the financial crisis on French hospitals is a certain moralisation of practices and relations between health establishments and banks. This can be seen with the signing of the GISSLER chart, which aims to formulate a code of good practice for financial relations between banks and public institutions. The agreement signifies:

- Commitment from the banks to no longer propose high risk products;
- Commitment from the banks to clearly explain the products proposed;
- Commitment from hospitals to be transparent in their management of debt and borrowing.

To conclude, the crisis revealed the solidity of French hospitals and more importantly, provoked the realisation of the necessity for prudent management of debt to protect hospitals from the volatility of the markets. Like all crises, it will be, we hope, the start of the stabilisation of practices, which will guarantee the development of hospitals and their modernisation.

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ENERGY EFFICIENT HOSPITALS

The Latest Projects and Resources for Energy Saving in the Healthcare Sector

By Lee Campbell

Hospitals consume enormous amounts of energy. Just think about all the equipment and processes in hospitals; 24 hour heating and lighting teamed with ventilation, sterilisation, laundry and food preparation among others.

Energy savings and the environment are also high on the political agenda across Europe and beyond. But how exactly do we go about introducing energy saving techniques and materials into our hospitals? This article will present several programmes and initiatives for energy saving in the healthcare sector. On closer inspection it is apparent that paying attention to energy and promoting sustainable healthcare is not only a good way of maintaining corporate social responsibility. Energy savings and sustainable healthcare are also drivers of innovation and cost effectiveness. Reducing our energy bills is good for us as well as the environment. Energy savings can come from initial design (for best results) but also in updating and refurbishing certain areas.

An interesting introduction to energy efficiency in hospitals can be found at www.leonardo-energy.org/hospitals. Leonardo Energy is the global community for Sustainable Energy Professionals. An application note published in 2008 describes the use of energy and energy saving potential in hospitals and some of the figures are quite shocking.

The Green Guide for Healthcare (GGHC)

The Green Guide for Healthcare (GGHC) markets itself as "the healthcare sector's first quantifiable sustainable design toolkit integrating enhanced environmental and health principles and practices into the planning, design, construction, operations and maintenance of healthcare facilities."

A joint project between Center for Maximum Potential Building Systems and Health Care Without Harm, the guide began in 2004 and focuses on patient care and safety, environmental sustainability and public health. Through the website members have access to health focused tools, educational resources and technical guidance to help them improve the design and processes of their institutions to become more sustainable "healing environments".

Users include healthcare executives, medical and design professionals, engineers, constructors, manufacturers, facility managers, government agency staff, academics and researchers, and service providers. GGHC recognises enormous energy consumption of hospitals with their 24/7 operating time, chemical use, high use of water and infection control understands that this often makes the implementation of sustainability protocols difficult. With this in mind, GGHC has three main objectives:

- To support healthcare's fundamental mission to protect and enhance individual and community health;
- To acknowledge the intrinsic relationship between the built environment and ecological health; and
- To use the precautionary principle to underpin decision-making.

The Green Guide believes in health-based design principles but it is not a regulatory body. It is not about creating regulatory requirements or minimum standards for design, construction or operations. It is a voluntary educational tool that promotes continuous improvement in our sector.

There are currently 34,424 registrants on the website and the Green Guide supports 278 registered projects. This informative guide is growing fast with around 500 new registrations every month. Although based in the US there are more and more international registrants from 113 countries. The creators describe the guide as an "evolving document" as it is constantly updated with new information, pilot projects and the latest green building best practices. Members are sent the latest information via email.

The Green Guide is designed specifically for institutional occupancies such as acute care hospitals, "where continuous occupancy and specific regulatory requirements lead to energy intensive, complex buildings that cannot be approached with the same sustainable design and operation strategies as commercial office structures." It can be used for new facilities, renovations to existing facilities, and existing facilities can use it as a best-practice guide.

More information on the Green Guide to Healthcare is available at: www.gghc.org.

HosPilot

HosPilot is a European initiative for intelligent energy efficiency control in hospitals. Co-funded by the Competitiveness and Innovation framework Programme (CIP), the project started in March 2009 and will run for 36 months. As an ICT Policy Support Programme its main focus is ICT for energy efficiency in public building and spaces, including lighting.

The Action Plan for Energy efficiency adopted by the European Commission in 2006 aims at achieving 20 percent reduction in energy consumption by 2020. Buildings have been identified as one of the areas where the biggest energy savings can be made. Heating and lighting in buildings count for nearly 40 percent of the energy used in the EU and it is expected that this can be reduced by 27 percent.

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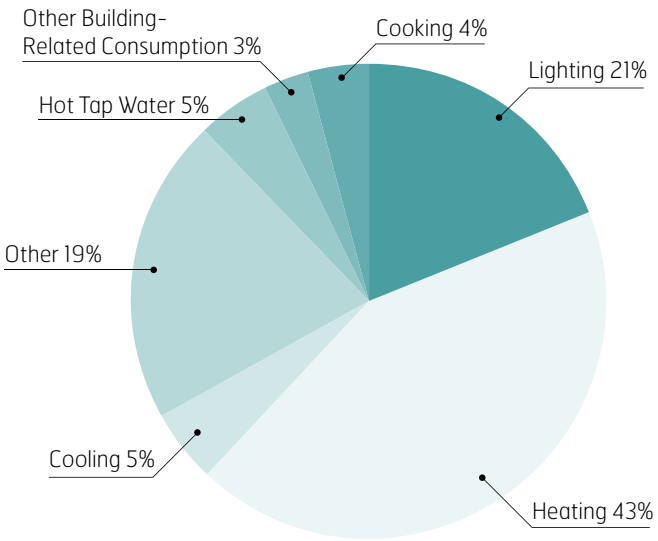

Figure 1. Energy Balance in a Hospital (source: ECN 2002)

The project was started on the belief of the need for a clear focus on energy efficiency specifically in hospitals. Previous projects have focused on schools and offices but hospitals use considerably more energy. They are also extremely complex institutions with many different types of users and demand several different comfort levels. Therefore HosPilot will focus on the two main technology areas of Lighting and HVAC (Heating, Ventilation and Air Conditioning), the largest energy consuming areas. It is their hope that ICT will play an important role in reducing energy consumption in hospitals.

The main objective of the project is "to prove that that the proposed energy reduction service leads to reduced energy consumption and improved level of comfort for the end users." This will be achieved by identifying the key requirements for hospitals regarding the building itself, its surroundings and usage and then designing a generic methodology addressing the needs, yielding the most energy efficient solution. Existing energy technologies will be grouped together to offer one holistic energy saving device.

To prove the efficacy of the proposed service, HosPilot will execute three pilots in operating hospitals. As a demonstration project, HosPilot will showcase advanced ICT technology for future replications at regional, national and European levels.

The project will enable energy saving scenarios in two key areas: Patient/nursing wards and surgeries and Hospital surroundings (parking lots, arriving patients and visitors.) Wards and surgeries are in constant use and HVAC is controlled to comfort level according to night and day. With the project, lighting is at (dimmed) comfort level by default and the patient can make individual adjestments. Incoming daylight will be used to limit the artificial light component of the comfort level. During medical procedures the artificial light will be raised to the functional level.

Lighting in hospital surroundings will also be dimmed to orientation level during night time and raised to functional and safety level when ambulances arrive, people enter the parking lot, or patients find their way to First Aid.

The new, energy saving service will provide advice on how to reduce energy consumption, the installation of the system and the monitoring and tuning of energy the consumption, settings tailored to individual hospitals. The proposed service will tailor, install and tune an ICT based system that will significantly reduce the energy consumption in the hospital. This service will then be disseminated to the open market, so the total service can be exploited as one package by the consortium and/or other organisations, e.g. SMEs, consultancy agencies specialised in energy efficiency.

The benefit of this proposed service is that the hospital is in contact with one expert for advice on the complete solution, bypassing the time consuming process of contacting a number of experts for the various technologies. It is an integrated system encompassing both lighting and HVAC.

For information about the three pilot systems in the Netherlands, Spain and Finland or HosPilot in general, please visit: www.hospilot.eu

Other Projects and Resources

There is a plethora of information on energy efficiency and sustainable healthcare online. Health Care Without Harm (HCWH) have submitted articles to *(E)Hospital* in the past focusing on waste management and sustainable healthcare. HCWH is an international coalition of hospitals and healthcare systems, medical professionals, community groups, health-affected constituencies, labor unions, environmental and environmental health organisations and religious groups. The group shares a vision of a healthcare sector that does no harm, and instead promotes the health of people and the environment. (www.noharm.org)

The European Union have been actively involved in promoting energy efficiency in hospitals for many years now. The BUILD HEALTH Project is an example of this. Co-funded by the European Commission within the Sixth Framework Programme (2002-2006) the BUILD HEALTH project was the first European project to provide the foundation for making the right decisions regarding energy use and optimisation of comfort in the healthcare sector. Aware that the healthcare sector is one of the most energy intensive in Europe, the project focuses on the early design period during which there is huge potential for improving energy efficiency in the sector. On a theoretical and practical level energy efficiency gains are demonstrated in three hospitals in the UK, Moldova and Italy.

BUILD HEALTH also provides comprehensive reports and information for the key actors within the healthcare sector. Design reports, monitoring reports and information on other projects can be found on their website, including a design handbook on energy conscious hospital and healthcare building designs: www.buildhealth.eu.

We hope that this brief introduction to projects and resources on energy efficiency in hospitals will help to inform you on the options available for your hospital.

THE DANISH HEALTHCARE QUALITY PROGRAMME (DDKM)

By Asger Hansen

The Danish Healthcare Quality Programme is a national system intended to support a continuous quality improvement of the Danish healthcare service as a whole. It is a method to generate persistent quality development across the entire healthcare sector in Denmark: providing standards for good quality and methods to measure and control this quality.

The first draft of the programme proposal was presented at a public hearing in the spring of 2003, and in November 2004 an agreement on establishing a new organisation to run the operation and further development of the programme began. The organisation was established as an independent institution headed by a board of directors, from the Ministry of the Interior and Health, the National Board of Health and the Danish Regions as representatives of the hospital owners.

The objectives of the Danish Healthcare Quality Programme are:

- To avoid errors causing loss of lives, quality of life and resources;
- To ensure that knowledge achieved via research and experience is utilised in all branches of the healthcare sector;
- To document work performed;
- To achieve the same high quality across geographical boundaries and sectors;
- To generate coherence in citizens' pathways across sectors – e.g. in the transition from hospital to local healthcare;
- To render quality within the healthcare sector more visible;
- To avoid that all institutions must invent their own quality assurance system; and
- To strive towards excellence – at all times.

The Danish Healthcare Quality Assessment Programme aims to include all Danish publicly financed healthcare services and seeks to operate on a cross-sectoral basis. The programme is a result of a collaboration between central government and the regions, thereby covering the public healthcare sector in full. Also, municipalities, private hospitals, and pharmacies have signed agreements to become a part of the programme.

The programme aims at generating and combining the data already being collected today in the Danish health sector. These data include, among others, the national quality databases, adverse events, the National Indicator Project and the National Patient Satisfaction Surveys.

There is also an international dimension. This is why the accreditation standards must be approved by the international accreditation programme organisation, ISQua, the International Society for Quality in Healthcare.

Organisation

The establishment of the quality programme made it necessary to establish a new organisation, and therefore The Danish Institute for Quality and Accreditation in Healthcare (IKAS) was created in 2005 to develop, plan and run DDKM. The institute employs approximately 30 people, with the majority being qualified within the areas of medicine and healthcare. IKAS has been selected as one of the organisations, which on a global level, place the standards of good quality in the healthcare sector. Also, the director of IKAS is a member of the Accreditation Council of ISQua. The first version of the DDKM for hospitals was officially accepted by ISQa in September 2008.

Accreditation

The Danish Healthcare Quality Programme is based on the quality method known as accreditation. The basic principle of accreditation is to determine a minimum level of good quality within a number of areas, which are followed up for their level of compliance. The faults and omissions discovered in the process are used as an empirical basis to improve quality.

Each hospital and organisation introduce their own new standards and perform evaluations themselves in the process. Prior to the final accreditation, an external survey is conducted by a team of medical professionals who have received hands-on training by IKAS. They evaluate compliance to the standards. Survey and accreditation is repeated every three years. The standards are also revised every three years, and new standards are added, the reason being that accreditation is based on maintenance and development of quality on a continuous basis.

Standards are available:

- For general areas such as medication, patient involvement, resuscitation and inter-sectoral transfer;
- Within the organisational area, with standards for management, data safety and technology; and
- For various disease areas such as gastric ulcers and diabetes.
- In the first generation of the Danish Healthcare Programme IKAS has submitted the following standards (accepted by ISQua):
- 104 standards for the regional healthcare sector;
- 50 standards for the local healthcare sector; and
- 42 standards for pharmacies.

The IT-System TAK

IKAS and DDKM developed a web-based IT-system, known as TAK, containing all standards that support and facilitate the process from the time of receipt of standards to final accreditation. TAK is developed in collabora-

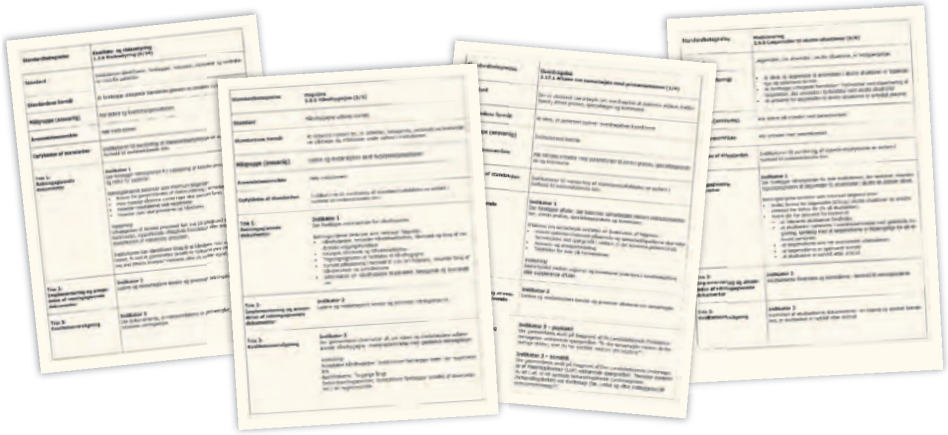

Figure 1.
- DDKM for hospitals contains 104 accreditation standards
- DDKM for pharmacies contains 42 accreditation standards
- DDKM for municipalities contains 58 accreditation standards
- DDKM for prehospital areas contains approx. 50 accreditation standards

tion with the regions and users from municipalities and community pharmacies.

TAK is a national system making it possible for different organisational levels to collaborate on quality development in one system. At national level, guidelines can be attached to a standard. At regional level, action plans can be added for a number of standards. At the individual unit level, the quality coordinator can use the documents. Data are shared; they are passed around and filed in a lot different places.

TAK is used in all parts of the implementation process – right from the division of accreditation standards and indicators for the institutions to completion of the accreditation report.

The system comprises all the accreditation standards and makes it possible to divide the standards between those who are going to work with compliance of standards. Furthermore, TAK provides possibilities to follow the process of compliance of standards – and guidelines and action plans can be attached to TAK in both a central and decentralised way.

Thereby, TAK provides an overview of the division of labour in connection with the work with the DDKM and with the results – likewise the system eases the collection of relevant data.

The Danish National Indicator Project (NIP)

The Danish National Indicator Project was established within the Danish Healthcare System in 1999. The project aims to document and develop the quality of healthcare in disease specific areas. It assesses the healthcare system as an organisation instead of focusing on individuals.

The aim of the project is not to find scapegoats but to bring forth the best possible basis for the improvement and development of quality in the healthcare system. It facilitates a dialogue between the healthcare providers, the leaders, the political system and the patients on the basis of evidence based documentation.

The Danish National Indicator Project measures the quality of care provided by the hospitals to groups of patients with specific medical conditions. The aim is to create awareness in patients, families, doctors, nurses and other healthcare professionals about the extent to which the completion and outcomes of the treatment are up to the standards expected from a well-functioning healthcare service.

From 2000, national quality standards, indicators and prognostic factors have been developed. Quality of care is now measured (in an audit) for eight diseases:
- Acute surgery (bleeding gastroduodenal ulcer and perforated peptic cancer);
- Chronic Obstructive Pulmonary Disease (COPD);
- Diabetes;
- Heart failure;
- Hip fracture;
- Lung cancer;
- Schizophrenia; and
- Stroke.

The national audits for every disease are carried out once a year, by the multidisciplinary indicator panel for the specific disease, in order to explain the risk-adjusted results and to point out and recommend activities for quality improvements. When the results from NIP are available they are examined by doctors, nurses and other healthcare professionals involved in treating patients. The objective is to find the areas within the courses of treatment where the quality is already adequate as well as the areas in need of improvement.

Implementation: Survey Team

The survey team is a group of specially educated peers, who perform an external survey in an institution. The main task of the team is to carry out an assessment of the observations related to the standards of accreditation, and summarise these in a total valuation of the institution. The survey team must include surveyors from comparable institutions to that being surveyed.

During 2009 and 2010 there has been training for surveyors in Danish hospitals. The courses include a mix of theory and training exercises with a focus on the standards of accreditation, the principles of assessment, communication and interview techniques, ethics, reporting and the process of accreditation. All Danish Hospitals, public as well as private, are currently working with implementation of the first national system of quality, DDKM. By June 2012 all hospitals should finish their accreditation. At this point, 24 Danish pharmacies have been accredited in DDKM and three municipalities will soon follow.

For further information of the DDKM and the NIP: www.ikas.dk and www.nip.dk

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MALNUTRITION IN EUROPEAN HOSPITALS: MORE ACTION NEEDED AT EU LEVEL

Reporting from Nutrition Day 2010

Malnutrition affects many people across all healthcare settings, from the one in four patients admitted to hospital to well over half (up to 60 percent) of all elderly people living in care homes. As well as impairing physical function and quality of life, malnutrition increases complication rates, mortality, hospital readmissions and length of hospital stay. It places serious burdens on already-stretched healthcare resources. In the UK in 2007, public expenditure on diseases-related malnutrition was estimated to be in excess of 15 billion euro per annum, corresponding to 10 percent of the total expenditure on health and social care. The estimates for EU stand at 120 billion euro per year.

Malnutrition Still Goes Undetected and Untreated in Hospital Inpatients

A study conducted in a large Danish hospital found that as many as 40 percent of patients at risk of malnutrition had not been screened for nutritional risk.

Another Danish hospital study found that almost 40 percent of patients in internal medicine, gastrointestinal and orthopaedic surgery departments were at nutritional risk and two thirds did not have a nutritional care plan or monitoring of dietary intake.

A prospective study of 395 newly admitted patients to general medical wards in a Dutch hospital revealed that nutritional assessment and intervention were not sufficiently applied by any professional (medical doctor, nurse, medical student) at any stage of the pre-, actual and post-hospitalisation period.

The Role of Hospitals

Good nutritional care includes nutritional screening that leads to the development of an individualised patient nutritional care plan. This care plan takes into account evidence-based guidelines with respect to selecting the most appropriate nutritional intervention. Patients' progress must be monitored regularly against the goals set out in the care plan.

Nutritional screening coupled with appropriate intervention will help lead to benefits for patients in terms of outcome. Oral nutritional supplements (ONS) are increasingly recognised as an integral part of the overall patient management strategy for malnutrition in hospitals, based on the good quality evidence that ONS lead to improvements in nutritional intake, body composition, clinical, functional and economic outcomes.

Such improvements are most likely to be achieved by a multidisciplinary approach, with input from senior managers and clinicians and clear guidelines and relevant training given to key healthcare professionals involved.

- One in four patients admitted to hospitals in Europe are malnourished
- The health-related costs of people suffering from malnutrition are estimated at a breathtaking 120 billion euro per year in the EU

What is Being Done at EU level?

Appropriate attention to managing malnutrition is being encouraged in Brussels by political heavyweights and experts. At a recent conference to mark NutritionDay 2010, organised by the European Nutrition for Health Alliance (ENHA) and bringing together the European Society for Clinical Nutrition and Metabolism (ESPEN), the European Parliament and the Belgian Presidency of the EU, participants agreed that the problem needs to be tackled at every level; by governments, by health and social care providers, by professionals and by individuals themselves.

Participants agreed that clear and practical evidence-based advice on tackling malnutrition is essential for healthcare professionals to achieve improved patient outcomes, clearly-articulated individual care plans and appropriate use of resources.

Conference host Slovenian MEP Alojz Peterle, Co-Chair of the European Parliament's Environment, Public Health and Food Safety (ENVI) Committee's Working Group on Health, called for mandatory nutrition risk screening across Europe and strongly urged his colleagues to adopt a Parliamentary Resolution on this.

Momentum is gradually building at the highest political levels for better detection and individualised treatment of this often undetected but debilitating and costly morbidity risk.

INVESTING IN HYBRID IMAGING TECHNOLOGY

What are the Best Bets in a Clinical Environment?

By Gustav K. von Schulthess

This article discusses investments in clinical hybrid imaging technology in general and PET-MR in particular, and examines the extent to which each option meets the six criteria listed in the box below. It will focus on oncologic, neurologic and cardiac imaging.

PET-CT a Mature Offering

PET-CT is useful in between 20 and 50 percent of oncology patients. Its almost simultaneous data acquisition is particularly useful in the abdomen, where patient repositioning between scans, bowel motion, and variable bladder filling can hamper fusion of data sets from separately acquired scans. PET-CT is infrequently used in brain imaging because software data fusion is easy and MRI is the mainstay. In cardiac imaging the advantages of PET over SPECT perfusion imaging are limited and software integration is adequate. PET-CT technology is mature and easy to operate, and its cost-effectiveness can be demonstrated (see further reading for more information).

The synergies of PET and CT in oncology were understood early. Not only is there an important clinical need for anatomic referencing of the metabolic images, but the speedily acquired CT data can also be used for attenuation correction of the PET images, thus obviating the slow PET attenuation correction systems. This has led to consistent semiquantitative PET images, which is important mainly in therapy monitoring. Technically, integration of PET and CT saves money in comparison with independent systems. A single operating console, table, and room are needed rather than two. As a PET scanner is considerably more expensive than a CT scanner and PET scanner use for attenuation scanning takes much longer than CT data acquisition, integration of PET and CT makes sense clinically and economically.

Thus the first four criteria outlined are largely satisfied by the integration of PET and CT, with use of FDG (fluorodeoxyglucose) or other tracers of value in oncology. The "soft factors" five and six have some importance with regards to the choice of the PET and CT device in a PET-CT scanner. Few would argue that in oncology the use of a 64-slice CT confers an advantage over a 16-slice or multislice CT with an even lower slice number. Which type of detector crystal is used in PET scanners may also be more of a soft than a hard factor in oncologic PET. Hence, emotionally induced over-investment definitely may influence the choice of the CT in PET-CT, but also have some impact on the choice of the PET system.

Where is SPECT-CT?

SPECT-CT differs in important respects from PET-CT. It has a lower spatial resolution than PET and is relatively low cost compared with a state-of-the-art CT scanner. In addition, the need for attenuation correction is less established than in PET. This means that during SPECT data acquisition a CT scanner that is comparatively expensive is idle for long periods. The most clinically relevant SPECT exams are bone scanning and myocardial perfusion imaging. Anatomic referencing is not critical in a bone scan as it has an adequate anatomic reference in itself. Still, superimposed CT data are helpful for the distinction e.g. between degenerative and metastatic lesions, and thus SPECT-CT appears useful. In myocardial perfusion imaging, attenuation correction can be done by software fusion of CT data.

The problem of one system idling during data acquisition is exacerbated in cardiac patients undergoing SPECT-CT because CT coronary angiography has to be possible and this requires a 64-slice CT or better. In a high-throughput cardiac setting, integrating one of the new, very fast – but expensive – CZT cameras with a high-end CT scanner may make economic sense. In summary, SPECT-CT is not as successful in meeting criteria one to four, above, as PET-CT. The emotional factors five and six, are important because many nuclear medicine sites that do not have PET-CT will opt to display their power by purchasing a SPECT camera with a good CT scanner, "overkill" in most settings.

PET-MR: Too Early to Tell?

The lack of clinical data makes a discussion of PET-MR largely speculative. To justify adding MR to PET we have to identify tasks for which PET-MR may be superior to PET-CT, which in turn requires identification of those areas where MR performs better than CT. MR is better than CT in the brain, the musculoskeletal system, some head and neck applications, the pelvis and liver disease. In the chest, CT excels and in the heart MR has yet to prove its clinical usefulness in a broad sense. In the brain, software fusion is very easy and so there the sole argument for integrated imaging is simultaneous data acquisition, which can only be provided in fully integrated PET-MR systems.

Choosing a hybrid system is like buying a new car. In both cases, customers ask:

1. Does it improve something for me?
2. Is its technology mature?
3. Is it cost-effective?
4. Is it easy to operate?
5. Is it more fun to drive?
6. Does it make me more attractive?

While simultaneous data acquisition may be of benefit in resolving some research questions, it probably does not offer advantages in a clinical setting. Rather than temporal simultaneity, pharmacokinetic simultaneity should be attained in a PET-MR examination. In other words, if one has an uptake time of 60 minutes or so for FDG and most other clinically useful tracers prior to PET imaging, the meaning of simultaneity becomes somewhat blurred. When does MR have to be acquired to reflect the physiological state of FDG uptake? In fact, FDG uptake reflects a physiological state extended over many minutes and so the question of temporal simultaneity becomes moot. With these considerations in mind, we are left with possible PET-MR applications in the neck, abdomen, pelvis, and musculoskeletal system. While there are technical developments in MR towards whole-body surveying scans, these can be done much more effectively with CT, so extended staging is still a domain of CT scanning. Hence, the first likely clinical applications are focal imaging of PET-MR with extended body PET surveys.

Technically we have to distinguish between fully integrated PET-MR systems, which can simultaneously acquire PET and MR data, and sequential systems deployed in one or two rooms and connected by a shuttle. A shuttle would be a table on which the patient can be transferred to the other imaging device without changes in body position. In fact, current PET-CT and SPECT-CT are one-room sequential systems where the system table serves as the shuttle. Full integration of PET-MR is very expensive as completely new PET detectors have to be developed. A whole-body fully integrated PET-MR system would likely cost over four million euros, and nobody currently disposes of any clinical data to argue in favour of or against buying such a system. The advantage of sequential systems connected by a shuttle is that the PET and MR scanners can be placed sufficiently far apart that today's photomultiplier PET detector technology still works. For this reason, the shuttle distances need to be two or more metres.

The advantage of single-room sequential PET-MR is that it requires only one – albeit large – room. A two-room system has the advantage that the systems can be run independently if needed and that the system can be operated in a "pipeline" mode: once the first patient enters the second scanner, the first scanner is free to receive the second patient and so on. All systems consisting of a PET and an MR scanner will have the problem that the system is unsuitable for fast acquisition of attenuation correction data. One has either to revert to the old PET source attenuation correction or to use MR data for attenuation correction. Currently, there is no algorithm that allows consistent use of the second option. Hence a good starting system would be a two-room shuttle-linked PET-CT-MR system with the CT providing attenuation data or more. Another unsolved problem in PET-MR is how to deal with all the MR coil gimmickry when the patient enters the PET. It will cause additional attenuation artifacts, which have to be corrected for. Again, no mature technology is available to deal with this.

> Current PET-CT and SPECT-CT are one-room sequential systems where the system table serves as the shuttle

In light of these unresolved issues, points one to four above have to be answered as follows. We have few data to prove that PET-MR may be useful and the technology largely does not exist yet. Cost-effectiveness may be present for a two-room shuttle-connected PET-CT-MR system, as the system can be operated in the "pipeline" mode described above or independently. A single-room PET-MR system will be much less effective, and the fully integrated system – while efficient in the sense that data acquisition is simultaneous – will be extremely costly owing to the major re-engineering efforts needed. Ease of operation is not proven either for shuttle operation or for MR local coil handling. So the tremendous hype around PET-MR is likely due to the soft factors five and six defined at the outset. While PET-MR may be interesting, the "sex appeal" of such a system seems to completely outweigh reason at this point, and in the view of this author PET-MR should remain an academic endeavour until substantial clinical data exist that prove its utility over PET-CT in respect to defined clinical questions.

Conclusions

In summary, PET-CT is of proven utility and has many current clinical indications. SPECT-CT is clinically established, but today's system designs require high investments in technology that is idle for the most part and therefore not cost-effective. The shuttle system concept explained above for PET-MR could also be explored in SPECT-CT. PET-MR is currently surrounded by much hype and no data. Data will have to be acquired and carefully analysed in comparison with PET-CT data. This task is best done in academic centres and so for the next few years the installation and use of such systems should be largely confined to academic centres.

Whether, where, and when PET-MR will see the light of day and be introduced into the wider clinical environment cannot be stated, nor is it possible to draw conclusions on the form that PET-MR would then take, i.e. fully integrated or shuttle integrated. Nevertheless, the soft factors cannot be ignored and may still lead buyers to adopt PET-MR technology much too early and without good clinical or financial arguments. If one radiological practice looks much "sexier" than another with a PET-MR, buying decisions will become irrational. Finally, it is important to note that equipment manufacturers love integrated imaging systems because they can always sell two for one; hence what may be soft factors for the buyers may be clear-cut financial factors for the vendors.

Further Reading

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SUSTAINING THE FUTURE OF NUCLEAR MEDICINE

What are the Best Bets in a Clinical Environment?

By Dervla Gleeson

The Netherlands continues to be at the centre of debate regarding the continued supply of medical isotopes worldwide. Molybdenum-99, the parent generator of technetium-99m, is a crucial tool used by nuclear medicine departments to pinpoint cancer. The substance is regularly in short supply because only five large commercial producers exist worldwide, mainly via older reactors nearing the end of their lifecycle. The High Flux Reactor (HFR) in Petten, the Netherlands, a property of the Joint Research Centre (JRC) of the European Union, is Europe's largest supplier and was therefore one of the key catalysts for concern for supply of this agent. In August 2008, a jet of gas bubbles was discovered in the primary cooling water system in the Petten HFR during a standard inspection and the Nuclear Research and Consultancy Group (NRG), operator of the HFR and nuclear expert body in The Netherlands took the reactor out of service on 19 February so that localised repairs could be made. This reactor is only recently back in operation, following completion of repairs but is nevertheless planned to finish its lifecycle in 2015.

NRG states that the facility currently supplies around 60 percent of European and 30 percent of global demand for medical isotopes and over 24,000 patients are treated with isotopes produced in Petten every day. Also, one of its neutron beam channels, originally installed for performing research, was modified for the direct irradiation of patients. When the facility broke down earlier this year, it prompted a crisis as it, and several other worldwide reactors reach the end of their lifecycle. Stakeholders realise that now, more than ever, alternate strategies will need to be developed in the likely reoccurrence of such a crisis to ensure that patients can continue to benefit from nuclear medicine.

Said Rob Stol, General Director of NRG "We are very much aware of our great social responsibility. As you can imagine, we are delighted that the reactor is back in action so that we can resume our work. The first isotopes are being produced right now and our research into materials and fuels for nuclear power stations and recycling of nuclear waste is up and running again."

New Reactor Planned to Replace HFR

NRG is currently raising funds and seeking tenders for the construction of a new reactor in The Netherlands to replace the HFR, which will inevitably wind down. First generation research reactors in the EU are approaching operational retirement, as maintenance costs increase and materials and components age. NRG therefore plans to build a new research reactor called PALLAS which is estimated to cost up to a total of 500 million euros. This will be a state-of-the-art reactor equipped to meet the growing world demand for both nuclear knowledge and services and the production of essential medical isotopes. It will have the capacity to be the world's biggest producer of such isotopes.

The tender process for PALLAS began in 2007 and will continue through 2010 - 2011.

Background to the Crisis

Tens of millions of nuclear medicine procedures are performed each year, and demand for radioisotopes is increasing rapidly. Over 10,000 hospitals worldwide use radioisotopes in medicine, and about 90 percent of the procedures are for diagnosis. The most common radioisotope used in diagnosis is technetium-99, with some 30 million procedures per year, accounting for 80 percent of all nuclear medicine procedures worldwide. European Association of Nuclear Medicine (EANM) President Wolfram Knapp states that "More than 90 percent of all molybdenum-99 is produced in only five reactors throughout the world, namely in Chalk River (Canada), Petten (the Netherlands), Mol (Belgium), Saclay (France) and Pelindaba (South Africa). A prolonged reactor shutdown in Chalk River led to supply shortages in North America in 2007. In summer 2008 a shortage also occurred in Europe because all three European reactors were out of operation simultaneously. Since May 2009 the reactor in chalk River has been on an extended shutdown for repair. Over the next five to ten years there is a risk of a chronic undersupply because it is feared further interruptions in production may occur since all of the main reactors are over 40 years old". Ways of dealing with the crisis have been sought during this year in urgent discussions with various bodies including the Association of Imaging Producers & Equipment Suppliers (AIPES), the EU Health Security Committee (HSC) and the Nuclear Energy Agency of the OECD.

The licensing process began in Autumn 2009 with a "Notification of Intent to conduct an Environmental Impact Assessment" (EIA) for PALLAS. Public hearings have been held to inform the national EIA committee's approach to consideration of the Impact Assessment. This summer past, NRG received the 'Richtlijnen Milieueffectrapport', the final guidelines for the Environmental Impact Assessment. The PALLAS project team in Petten will guide design and construction processes, is responsible for the licensing and commissioning and will manage the design and construction of the reactor infrastructure. Depending on the success of fundraising, the facility could be constructed in 2014 or 2015 and become operational in 2016.

Alternate Strategies

Meanwhile the Technical University (TU) of Delft's nuclear research reactor will be used as a back-up facility for the production of the radioactive isotope molybdenum-99, when supplies run out. TU Delft's research reactor is used for scientific research in the fields of health, energy and materials. The Oyster Programme (which stands for 'Optimised Yield - for Science, Technology & Education - of Radiation') will enable the reactor to meet new scientific challenges and respond to societal issues. The production for molybdenum-99 is one example of this.

> PALLAS will have the capacity to be the world's biggest producer of such isotopes

The programme will enable the production of molybdenum to be increased as it will make more neutrons available.

TU Delft had announced earlier this year that its reactor could act as back-up facility when supplies run out. The Ministry of Health, Welfare and Sport has officially accepted this offer and asked the university to adapt its reactor for the production of this isotope. The Delft research reactor will now be adapted so that it can start to produce molybdenum-99. As soon as safety standards have been met and approved, the reactor will be able to produce molybdenum when required. 'The Reactor Institute Delft wishes to improve the care for cancer patients by helping to ensure that there are sufficient supplies of isotopes for medical use,' says Prof. Tim van der Hagen, director of the Reactor Institute Delft.

Perhaps the most recent of these developments is a cooperation between Dutch public utility Delta and French state-owned electricity group EDF, which will build a second nuclear reactor at Borssele (an existing one in this town already produces electricity) in the southwest of the Netherlands. Delta has signed Memorandum of Understanding to explore the appropriate contractual structure to incorporate a Joint Development Company (JDC), which may be established at a later stage for the development of the project.

Further Reading

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2. The options for the future production of the medical isotope 99Mo - European Journal of Nuclear Medicine and Molecular Imaging Volume 37, Number 10 (http://www.pallasreactor.eu/fileadmin/pallasreactor/user/docs/2010_Future_of_Mo99_production.pdf)

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OVERVIEW OF THE SPANISH HEALTHCARE SYSTEM

By Natalia Marczewska

The Spanish National Healthcare System ("Instituto Nacional de la Salud"), founded on Spain's General Healthcare Act of 1986, guarantees universal coverage and free healthcare access to all Spanish nationals, regardless of economic situation or participation in the social security network.

In 1998 the Sistema Sanitario Público (public health service) brought in an official mandate for both doctors and patients outlining the service to which they are entitled, explained in the Carta de Derechos y Deberes (Charter of Rights and Obligations).

Management

The national system has been decentralised since 2002, which has given the regional healthcare authorities the autonomy to plan, change and upgrade the infrastructure, leading to enormous development in the healthcare technology scenario, especially in the usage of information technology. The reforms, which regionalised the system, were implemented in order to provide greater and equal access to the population, thus avoiding the concentration of health services in urban areas. This has also improved response time and increased the participation of the target community in the development and management of the national healthcare system at regional and local levels.

The current system consists of three organisational levels:

1. Central (Organizacion de la Administracion Central)

The Ministry of Health (Ministerio de Sanidad y Consumo), the state's central administration agency, is in charge of issuing health proposals, planning and implementing government health guidelines, and coordinating activities aimed at reducing the consumption of illegal drugs.

2. Autonomous Community (Organizacion Autonomica)

Each of Spain's 17 Autonomous Communities (Comunidades Autonomas) is responsible for offering integrated health services to the regional population through the centers, services and establishments of that community.

3. Local (Areas de Salud)

The "areas de salud" are responsible for the unitary management of the health services offered at the level of the Autonomous Community and are defined by taking into account factors of demography, geography, climate, socioeconomics, employment, epidemiology and culture. To increase operability and efficiency, the "areas de salud" are subdivided into smaller units called "zonas basicas de salud".

The Inter-territorial Board of the National Health System (CISNS) is responsible for the coordination, cooperation and liaison among the central and autonomous region public health administrations. The board is chaired by the National Ministry of Health and the members are the Regional Ministers. It approves the national catalogue of services that must be provided by all regional health services (cartera de servicios communes). The catalogue of is divided into sections including primary care, specialised care, supplemental care, and pharmacy.

Primary Healthcare Services

Primary Healthcare services are available within a 15-minute radius from any place of residence. The main facilities are the healthcare centres, staffed by multidisciplinary teams comprising of general practitioners, paediatricians, nurses and administrative staff, as well as, in some cases, social workers, midwives and physiotherapists. The principles of maximum accessibility and equity mean that community primary healthcare also provides home care, whenever necessary and also deal with health promotion and disease prevention.

Specialist care is provided in specialist care centres and hospitals in the form of outpatient and inpatient care. Patients having received specialist care and treatment are referred back to their primary healthcare doctor, who assumes responsibility for any necessary follow-up treatment and care, ensuring the provision of continuous care under equitable conditions, irrespective of the patient's place of residence and individual circumstances.

Private Healthcare

Private healthcare insurance for treatment at private hospitals and clinics is not widespread and mainly used to avoid the sometimes long waiting lists to see specialist doctors in the public healthcare system. Only 10 percent of the population has voluntary private insurance although some private services are contracted by the public sector. Only in Catalonia, due to historical reasons, there are a large number of non-profit, semi-public entities. Private healthcare companies often offer quicker service to patients but also value-added services such as private rooms, express mailing of test results and keeping patients informed via email and SMS messages.

Funding the System

The Spanish healthcare system is principally funded through taxation. The country's total healthcare expenditure, amounts to 88,828 million euro, which accounts for 8.5 percent of the GDP. Public healthcare expenditure accounts for 6.1 percent of GDP and represents an expense per inhabitant of 1,421 euro. The central government provides financial support to each region based on population and demographic criteria.

Healthcare Resources

The National Health System has 2,914 health centres and 10,202 local clinics providing basic healthcare services to the local population. In 2009 there were 804 hospitals operating in Spain. The National Health System has 315 hospitals, equipped with 105,505 beds, and four Ministry of Defence's hospitals contributing with 995 beds. The remainder 465 hospitals are privately run and have 53,013 beds, which totals to 160,981 beds installed in Spain's hospitals. Public hospitals are generally much larger than private hospitals and deal with a much higher number of patients.

Excluding dialysis equipment, computerised axial tomography (CAT) is the most widespread high technology in hospitals and dependent facilities, with a total of 677 units and a ratio of 14.8 per million inhabitants. Magnetic resonance follows with 438 units and a ratio of 9.6 per million inhabitants. The number of mammography units dependent on hospitals totals 492. There are 4.7 physicians per 1, 000 inhabitants and annually they attend to more than 273 million medical consultations per year in primary care.

Healthcare Challenges

Spain has among the world's healthiest people with an average life expectancy of 81, one of the highest in the EU. The incidence of heart disease in Spain is among the lowest in the world, however, skin cancer is one of the highest.

Spain also takes a different view to rehabilitation, convalescence and terminal illness, leaving care in these cases usually to the relatives, meaning that are very few public nursing and retirement homes. This may prove one of the future challenges, as there is an increasing potential demand for social support services and benefits by the dependent population, and by carers.

However, one of the principle problems in Spain remains the limited coordination between the Autonomous Communities, which increases disparities in services and quality of care between the regions. Although the national system is overseen by the Ministry of Health and Consumer Affairs (Ministerio de Sanidad y Consumo) and coordinated by the Inter-territorial Board they focus more on long-term policies and cooperation and the responsibility of healthcare delivery lies with the individual regions.

Numerous projects to improve national cooperation have been implemented by the Spanish Ministry of Health such as the 'epSOS' (European patients Smart Open Services) pilot project, which aims to develop a practical framework and an ICT infrastructure that will enable secure access to patient health information, particularly with respect to basic patient summaries and ePrescriptions between different European healthcare systems. This should improve communication between Spanish regions and encourage cooperation.

The Spanish Presidency and eHealth

The Spanish Presidency of 2010 supported a fully integrated digital healthcare system in the post-2010 European Agenda and presented four strategic goals in healthcare, which aimed to:

1. Introduce a global vision for an e-health policy, totally integrated in the post 2010 European Agenda;
2. Drive a new e-Health Action Plan, facing the new European challenges;
3. Develop and promote ministerial agreements, in particular regarding integration of e-health in community policy; and
4. Implement reinforced governance.

In March 2010 two of the most important European events in the eHealth area took place: the High Level European Union Conference (EU) on e-health, and the World of Health IT (WoHIT) were bought together during the eHealth Week, which took place in Barcelona.

The eHealth Week was a meeting organised within the Spanish presidency of the European Union (UE) in conjunction with the European Commission, the Ministry of Health and Social Policy, the Health Ministry of the Government of Catalonia, the TicSalut Foundation, and HIMSS Europe. It was an initiative of the Ministry of Health of the Government of Catalonia during which, meetings of the European health ministers and the European Forum of Regions in eHealth enabled European regions and Spanish autonomous communities to discuss the importance of ICTs for the health systems and the extent to which they have been introduced in their territories. During the four days of the eHealth week 2010, more than 160 renowned international figures brought in their experience and views in a total of 46 sessions in which they analysed the application of ICTs in the health systems from a variety of perspectives: political, economic, strategic, business and social.

Sources:
www.msc.es
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www.ehealthspain.eu
www.ehealthweek2010.org
www.epsos.eu

SPANISH NATIONAL HEALTH SYSTEM

- 46,1 million inhabitants

Health Professionals	2007
MD	208,098
Dentists	24,515
Pharmacists	61,300
Nurses	243,000

Source: www.ehealthspain.eu

Willy Heuschen

DE NOUVEAUX DÉFIS POUR LES HÔPITAUX

La publication de cette édition d'*(E)Hospital* voit l'année 2010 s'achever, nous offrant l'occasion de faire le bilan de ce qui a été fait avant d'amorcer une nouvelle année. Le nouveau président de l'AEDH Heinz Kölking a considéré que le travail entrepris en 2010 atteste l'ouverture d'un nouveau chapitre dans l'histoire de notre association.

L'année 2010 n'a pas été uniquement le témoin de l'élection des membres du Bureau et du Conseil d'administration lors de l'Assemblée générale de notre association au cours du Congrès de Zurich. Elle a surtout été durablement influencée par le processus de réflexion qui y fut entamé et l'élaboration d'une stratégie à moyen terme en réponse aux changements structurels dans les systèmes de santé européens et dans les hôpitaux.

Ces changements structurels ont beau être divers, ils nous contraignent toujours à adopter une gestion de crise et une approche stratégique afin d'empêcher de plus importantes restrictions de la mission de service de nos hôpitaux. C'est le thème principal de ce nouveau numéro d'*(E)Hospital*. Les changements structurels ne résultent pas seulement de la situation économique tendue, comme c'est actuellement le cas dans de nombreux États membres européens. Les compressions budgétaires, quand elles sont imposées ou exigées à moyen ou à plus long terme, sont structurelles. Nous présentons dans ce numéro les conséquences que ces contraintes ont eu sur les hôpitaux français ainsi que les mesures à mettre en œuvre.

Une gestion de crise différente est exigée lors de l'apparition de nouvelles maladies ou, comme c'est le cas dans les hôpitaux irlandais, quand la livraison du matériel et des équipements nécessaires est réduite. En plus des exemples cités dans ce numéro, nous devons également prendre en compte les changements démographiques comme le vieillissement, le développement médical et technique, le nombre réduit de professionnels de santé et l'image de leur profession, sans oublier les conditions données par les cadres juridiques, qu'ils soient nationaux ou européens.

Les principaux points du programme de l'AEDH doivent, comme indiqué dans les résultats du processus de réflexion, proposer des conseils d'orientation pour une gestion adaptée à de telles conditions structurelles. Notre objectif est de transmettre à nos collègues le savoir-faire complémentaire à la fois théorique et pratique afin qu'ils puissent prendre une part active dans le cadre de leur fonction : qu'ils deviennent des partenaires actifs non seulement dans de l'exercice de leurs fonctions de gestionnaire au sein de leur hôpital, mais aussi comme interlocuteur auprès des plus hautes autorités.

Le programme de l'AEDH sera, en accord avec notre nouvelle stratégie, de plus en plus élaboré en partant de la base, d'abord au sein des associations nationales et ensuite au niveau des associations dans les trois comités consultatifs et dans les groupes de travail. Leur nouvelle composition vous est détaillée dans les « Nouvelles de l'AEDH ». Nous tenons également à remercier nos collègues qui ont, au cours des quatre dernières années, consacré leur temps et leurs connaissances à cette fonction. L'AEDH et les hôpitaux profiteront longtemps encore de leur précieuse contribution.

Il s'agit maintenant de mettre en application les résultats des processus de réflexion dans les nouveaux Conseils consultatifs et au cours des échanges avec les associations nationales. Le moment venu, nous vous en informerons sur le site web. Nous vous encourageons tous, que ce soit en qualité de lecteur ou de membre, à nous faire part de vos connaissances et de votre expérience professionnelle. Nous nous réjouissons de pouvoir continuer à partager nos expériences de façon constructive et enrichissante et je suis heureux de vous souhaiter, au nom des membres du Bureau et du Conseil d'administration, une bonne et heureuse année 2011.

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.

NOUVELLE COMPOSITION DES SOUS-COMMISSIONS DE L'AEDH

Lors de sa réunion du 15 octobre, le Bureau s'est prononcé sur la composition des sous-commissions. Nous voudrions partager ici avec vous les noms des membres ainsi qu'une brève description de chaque sous-commission, car ils jouent un rôle important dans la dynamique de notre association.

Sous-commission scientifique

Le champ d'application de la SCS est lié à la promotion de la compétence professionnelle des membres de l'AEDH. Il assure également le niveau scientifique et la pertinence des thèmes des différentes activités organisées par l'AEDH.

Les membres de la SCS pour 2010-2014 sont les suivants:
Gerry O'Dwyer, Président (IE)
Ugo Luigi Aparo (IT)
Matthias Bracht (DE)
Kristof Eeckloo (BE)
Rolf Gilgen (CH)
Doris Gillig (FR)
Asger Hansen (DK)
Paul Junck (LU)
Jørn Koch (DK)
Danielle Rossi Turck (BE)

Sous-commission "Affaires européennes" (SCAE)

Les objectifs de la SCAE sont l'encouragement de la culture ainsi que des systèmes hospitaliers des pays européens afin de constituer la base de la construction d'une Europe sociale. De plus, elle cherche à influencer la législation européenne concernant le secteur hospitalier, en servant de pont entre l'Europe et le directeur de l'hôpital.

Les membres de la SCAE pour la période 2010-2014 sont les suivants:
Marc Hastert, Président (LU)
Gediminas Cerniauskas (LT)
Richard Dooley (IE)
Victor Herdeiro (PT)
Oly Ilunga Kalenga (BE)
Marino Maligoi (DE)
Mieczyslaw Pasowicz (PL)
Corinne Séneschal (FR)

Comité de rédaction

Le comité de rédaction travaille sur le contenu de *(E)Hospital* qui est publié 5 fois par an. *(E)Hospital* joue un rôle très important pour nos membres, dans le partage des expériences et des informations sur la gestion des hôpitaux.

Les membres du comité de rédaction pour la période 2010-2014 sont les suivants:
Nikolaus Koller, Président (AT)
Juraj Gemes (SK)
Ann Marie O'Grady (IE)
Cédric Arcos (FR)
Freddy Iemants (BE)

Appel à participation à l'enquête sur les préférences de paiement.

En période de défis actuels concernant la qualité, mais également le coût des soins de santé à travers le monde, les mécanismes de paiement servant à rémunérer les prestataires et d'investir dans les services de soins sont sous étroite surveillance. Les décideurs examinent de plus en plus, et / ou organisent la mise en place de programmes novateurs, qui modifient la portée et les critères de paiement des soins de santé.

Malgré les preuves scientifiques des effets des différentes méthodes de paiement, la manière dont les fournisseurs de soins sont payés dépend de la négociation et des préférences des multiples parties prenantes (médecins, gestionnaires, décideurs, etc.) Un consortium de recherche de trois universités européennes (Louvain, Gand et Anvers) organise actuellement une enquête à travers l'Europe, les États-Unis et l'Australie pour mettre en lumière ces questions. L'enquête aura lieu du 1er Janvier au 15 février 2011 et prend environ une demi-heure à être complétée. Cette enquête est soutenue par des experts internationaux, venant d'Europe, des États-Unis et d'Australie.

Les gestionnaires de soins de santé, les décideurs, les chercheurs et les médecins sont invités à exprimer leurs préférences pour les systèmes de paiement et ses effets de paiement. Les participants recevront un rapport d'étude détaillé expliquant les résultats et les conclusions, avec des comparaisons entre les systèmes de santé et entre l'ensemble des parties prenantes. L'Association Européenne des Directeurs d'Hôpitaux apporte son soutien à cette étude et encourage tous ses membres à participer.

Pour commencer le sondage:
www.eahm.eu.org/surveys

Maurice Van Oyen

En 1965, M. Maurice van Oyen a été nommé gérant de la Sint-Janshospitaal, un hôpital de 800 ans d'histoire, situé dans le centre-ville, sur le site qui est appelé aujourd'hui "Oud Sint-Jan". A la fin des années soixante, il fut l'un des promoteurs de la construction d'un nouvel hôpital moderne en dehors de la ville, le «AZ Sint-Jan". Il resta directeur jusqu'en 1991.

Il a toujours été en faveur de contacts et d' échanges internationaux que se soit au niveau médical ao dans le domaine de la gestion, une tradition toujours présent à St. Jean.

Il a été l'un des membres fondateurs de l'AEDH en 1970 et a été actif pendant plus de 20 ans dans notre association.

Gérer la crise AH1N1

Par Gilberto Felipe Vazquez de Anda

L'épidémie de grippe observée en 2009 dans plusieurs villes du Mexique a affecté le système fragile des soins intensifs et le système de santé en général. Au cours de la première vague de la maladie, le manque réel d'équipements, de tests diagnostiques et de traitements antiviraux est devenu incontestable, le nombre insuffisant de respirateurs artificiels étant le plus préoccupant. Pour gérer cette crise imprévue, un plan d'action a été créé, donnant des directives pour la fourniture d'équipements adéquats et l'information précise du personnel et du grand public. Durant la pandémie, des stratégies innovantes concourant au secours des patients ont été observées, comme l'utilisation de la téléprésence grâce à des robots dans les hôpitaux de banlieue.

Comme prévu, l'ampleur de la seconde éclosion de la grippe AH1N1 a été plus importante que celle du printemps. Toutefois, le système de santé était mieux préparé et le plan d'action s'est révélé efficace dans la plupart des hôpitaux. Les patients de réanimation ont été traités conformément aux recommandations faites par le panel d'experts. Les unités de soins intensifs étaient occupées par les patients infectés et certains territoires spécifiques des hôpitaux avaient été isolés pour recevoir les patients présentant des symptômes plus modérés.

Gestion hospitalière en cas de catastrophe : êtes-vous prêt ?

Par Mike Clumpner, Jim Mobley

Le plan d'intervention d'urgence de votre hôpital est-il satisfaisant ? Comme pour tout projet de grande envergure, il peut sembler parfait sur le papier mais se révéler très insuffisant lors de son exécution. La planification des catastrophes devrait englober toutes les menaces légitimes et les hôpitaux envisager la possibilité d'être l'une des cibles principales au cours d'opérations terroristes.

Afin de limiter l'impact d'une catastrophe de grande ampleur, ils devraient posséder plusieurs systèmes redondants pour sauvegarder leurs plus importantes infrastructures. Ils devraient également limiter leur dépendance vis à vis des organismes extérieurs pouvant fournir un soutien lors de catastrophes et veiller à un entrainement régulier des participants, en insistant sur leurs rôles et responsabilités dans cette situation. En mettant l'accent sur ces éléments de base de la gestion des catastrophes, les hôpitaux peuvent en minimiser l'impact sur leurs capacités opérationnelles au cours d'une catastrophe de grande ampleur.

Faire face à l'imprévu

Par Lee Campbell

Lorsque le volcan islandais Eyjafjallajokull est entré en éruption en mars dernier, la médecine nucléaire en Irlande a été interrompue pendant d'une semaine. Un énorme nuage de cendres volcaniques a fermé l'espace aérien européen, empêchant les livraisons pour les départements de médecine nucléaire. Fionnuala Barker à l'Hôpital Saint-Luc de Dublin, a expliqué pourquoi cette situation s'est développée et comment la crise a été gerée: le technétium-99m, l'isotope radioactif le plus couramment utilisé en médecine nucléaire, est produit au Pays-Bas puis transporté par avion vers l'Irlande. Matériau extrêmement sensible au facteur temps, il perd dix pour cent de sa radioactivité par jour, et les hôpitaux et les réacteurs doivent se tenir strictement à ce planning. La fermeture de l'espace aérien a provoqué un rééchelonnement pour les patients, une pression sur les fournisseurs et des heures de travail supplémentaires pour maintenir le calendrier initial prévu depuis des mois. Depuis cette crise, l'Hôpital Saint-Luc a mis en place un groupe de secours qui a pour mission de se rencontrer et d'évaluer la situation dans l'eventualité d'une autre crise la communication et la planification étant des outils essentiels de gestion de crise.

Gestion des plaintes

Par Judith Polat-Firtinger

Les systèmes de gestion des plaintes sont d'excellents procédés pour permettre aux hôpitaux d'analyser la satisfaction des patients. L'association des hôpitaux de Vienne a développé un concept de gestion normalisé des plaintes en 2003. Mis en pratique en 2005, l'objectif général de ce nouveau système est d'améliorer la satisfaction du client, c'est à dire de réduire les expériences négatives à l'hôpital, en étant conscient de la fragilité de ce secteur, et d'améliorer le traitement des patients. L'outil le plus important dans un système de gestion des plaintes efficace est la facilité d'accès à la plainte par le patient. Les membres du personnel doivent également être très précisément formés dans le traitement des plaintes, l'écoute des patients et de leur famille et doivent savoir quels sont les cas qu'ils doivent confier à un gestionnaire.

Financement de crise : l'expérience française

Par Cédric Arcos

Les hôpitaux publics français sont des acteurs économiques majeurs. L'accroissement des campagnes pour la modernisation et le développement a appelé à d'importantes liquidités, et même si leur situation financière saine a pu en empêcher les effets à long terme, ils n'ont pas pu échapper à la crise financière qui a frappé en 2008. Quand elle a éclaté,

il leur a été de plus en plus difficile d'obtenir un crédit - de nombreux hôpitaux se les sont vus refuser - et ils ont dû rapidement se tourner vers des méthodes alternatives de financement.

Le résultat positif de la crise financière est la nouvelle relation entre les banques et les hôpitaux. En signant la charte GISSLER, les banques ont promis de cesser de proposer des produits à haut risque et d'expliquer en détail leurs termes et conditions, ainsi que de faire preuve de transparence dans leur gestion de la dette et des emprunts.

Le programme qualité des soins de santé danois

Par Asger Hansen

Le programme qualité des soins de santé danois est un système national destiné à soutenir une amélioration continue de la qualité des soins de santé danois dans son ensemble : il offre des normes de qualité et des méthodes permettant d'en assurer la mesure et le contrôle. Tous les hôpitaux danois, qu'ils soient publics ou privés, travaillent actuellement à la mise en œuvre de ce premier système national de la qualité et tous devraient avoir parachevé leur accréditation en Juin 2012. À ce jour, vingt-quatre pharmacies danoises ont été accréditées et trois régions sont attendues prochainement.

Investir dans la technique d'imagerie hybride

Par Gustav K. von Schulthess

Choisir un système hybride, c'est comme acheter une nouvelle voiture. Dans les deux cas, les clients demandent :
Quelles sont les améliorations que cela peut m'apporter ?
Sa technologie est-elle mature ? Est-il rentable?
Est-il facile d'utilisation ? Est-il plus agréable à conduire ?
Va-t-il me rendre plus intéressant ?

L'utilité du PET scanner est avérée et a de nombreuses indications cliniques actuellement. Le SPECT-CT est cliniquement établi, mais les systèmes actuels nécessitent des investissements techniques élevés restant pour la plupart inexploités, donc non rentables. Le scanner PET- IRM est aujourd'hui entouré de beaucoup de bruit mais nous n'avons aucune donnée le concernant.

Enfin, il est important de noter que les fabricants d'équipement aiment les systèmes d'imagerie intégrés, car ils peuvent toujours vendre deux appareils en un : ainsi, ce qui est perçu comme un élément rationnel par les acheteurs peut être déterminant financièrement pour les vendeurs.

Une énergie plus efficace à l'Hôpital

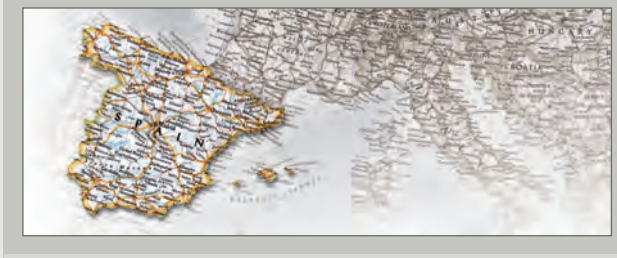
Par Lee Campbell

Les hôpitaux consomment d'énormes quantités d'énergie. Il suffit de penser à tout le matériel et les processus effectués dans les hôpitaux : 24 heures de chauffage et d'éclairage, plus la ventilation, la stérilisation, la lessive et la préparation des aliments, entre autres. Les économies d'énergie et les sujets liés à l'environnement ont une place importante au sein de l'agenda politique en Europe et au-delà. Mais comment faire des économies d'énergie et des matières techniques dans nos hôpitaux ?

Plusieurs initiatives européennes et mondiales, et des programmes encouragent l'efficacité énergétique dans les hôpitaux. Le guide vert pour les soins de santé (Green Guide for Health Care, GGHC) est un outil de conception durable qui intègre les principes de l'environnement et d'amélioration de la santé et des pratiques dans la planification, la conception, la construction, l'exploitation et l'entretien des installations de soins de santé. Citons également HosPilot, une initiative européenne pour le contrôle de l'efficacité énergétique intelligente dans les hôpitaux. Ce projet se concentre sur les deux grands domaines technologiques l'éclairage et le CVC (chauffage, ventilation et climatisation), les deux plus grands consommateurs d'énergie. Il nous laisse esperer que l'informatique jouera un rôle important dans la réduction de la consommation d'énergie dans les hôpitaux.

Le système de santé espagnol

Par Natalia Marczewska



Le système de santé national espagnol « Instituto Nacional de la Salud » a été fondé par la loi de 1986 relative aux soins de santé en Espagne. Il garantit une couverture universelle et l'accès gratuit aux soins à tous les ressortissants espagnols, indépendamment de leur situation économique et de leur contribution au système de sécurité sociale. Sa décentralisation en 2002 a donné aux autorités régionales de la santé la liberté de planifier, d'adapter et de moderniser l'infrastructure, conduisant à un développement très important de la technologie des soins de santé, et en particulier de l'utilisation des technologies de l'information. Les réformes de régionalisation du système ont été mises en œuvre afin de fournir un accès amélioré et plus équitable à la population, évitant ainsi la concentration des services de santé dans les zones urbaines.

Willy Heuschen

NEUE HERAUSFORDERUNGEN FÜR KRANKENHÄUSER

Beim Erscheinen dieser Hospital-Ausgabe gehört das Jahr 2010 schon der Vergangenheit an. Der Übergang in ein neues Jahr bietet Gelegenheit zum Rückblick auf das Alte...und zur Ausschau auf das Neue. Heinz Kölking, frisch gewählter Präsident der EVKD wertete die Arbeit des Jahres Jahr 2010 als neues Kapitel in unserer Verbandsgeschichte.

Nicht nur die Neuwahlen des Vorstandes und des Präsidiums anlässlich der Mitgliederversammlung sowie der Zürich-Kongress gehören dazu. Nachhaltig geprägt bleibt das Jahr 2010 auch und vor allem durch den angestoßenen Reflexionsprozess und die Entwicklung einer mittelfristigen Strategie als Antwort auf die Strukturwandlungen innerhalb der europäischen Gesundheitssysteme und mithin der Krankenhäuser.

Diese Strukturwandlungen können vielfältig sein und haben eines gemeinsam: Sie fordern immer ein Krisenmanagement und ein strategisches Vorgehen, will man größeren und nachhaltigen Einschränkungen im Versorgungauftrag der Krankenhäuser vorbeugen. Dieses Thema steht im Mittelpunkt in dieser Hospital-Ausgabe. Strukturänderungen ergeben sich nicht nur aus der angespannten Haushaltslage wie derzeit der Fall in vielen europäischen Mitgliedsstaaten. Die auferlegten bzw. geforderten Finanzierungskürzungen sind zumindest mittelfristig, wenn nicht langfristig angelegt und daher strukturell. Wir berichten über Folgen, die sich in französischen Krankenhäusern ergeben und über die Maßnahmen, die zur Umsetzung anstehen. Ein anderes Krisenmanagement ist gefordert, wenn neue Krankheitsbilder auftauchen oder wie im Fall der irischen Krankenhäuser die Anlieferung von nötigen Sachgütern eingeschränkt ist. Neben den in dieser Ausgabe dokumentierten Beispielen zählen wir u.a. auch die demographischen Veränderungen wie die Vergreisung, die Entwicklung der Medizin und der Technik, das Berufsbild und die Anzahl zur Verfügung stehenden Gesundheitsberufe und nicht zuletzt die gesetzlichen Rahmenbedingungen, national oder auf EU Ebene dazu.

Die Schwerpunkte des EVKD-Programms müssen, wie im Ergebnis des Reflexionsprozesses festgehalten, Orientierungshilfen zu einem diesen strukturellen Rahmenbedingungen angepasstem Management anbieten. Unser Ziel ist es den Berufskollegen ergänzendes Know-how sowohl in der Theorie als auch in der Praxis zu vermitteln, damit sie als aktive Mitgestaltende ihrem Berufsauftrag gerecht werden: Aktiv nicht nur in der fachmännischen Wahrnehmung der Management-Aufgaben im eigenen Krankenhaus sondern auch als Gesprächspartner mit übergeordneten Behörden.

Das EVKD-Programm wird in unserer neuen Strategie verstärkt von der Basis erarbeitet, zum einen in den Nationalverbänden und dann auf Verbandsebene in den drei Beiräten und in den Arbeitsgruppen. In den News geben wir die neue Zusammensetzung bekannt. An dieser Stelle danken wir den Kolleginnen und Kollegen, die in den letzten vier Jahren ihr Wissen und viel Zeit in diese Aufgabenstellung eingebracht haben. Ihr wertvoller Beitrag bleibt der EVKD und somit auch den Krankenhäusern nachhaltig erhalten. In den neubesetzten Beiräten und im Austausch mit den Nationalverbänden gilt es nun die Ergebnisse des Reflexionsprozesses umzusetzen. An dieser Stelle und auf der Webseite werden wir darüber berichten. Alle unsere Leser und Mitglieder sind dazu aufgerufen, auch ihr Wissen und ihre Berufserfahrungen einzubringen. Wir freuen uns auf einen weiteren konstruktiven und bereichernden Erfahrungsaustausch. In diesem Sinne darf ich auch im Namen des Präsidiums und des Vorstandes allen ein gutes und erfolgreiches Jahr 2011 wünschen.

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.

NEUE AUFSTELLUNG DER EAHM-BEIRÄTE

Im Verlaufe der Sitzung vom 15. Oktober entschied der Vorstand über die Aufstellung der Beiräte. Wir möchten an dieser Stelle die Namen der Mitglieder der Beiräte bekanntgeben, zusammen mit einer kurzen Beschreibung jedes Beirats, da diese in der Dynamik unserer Vereinigung eine wichtige Rolle spielen.

Wissenschaftlicher Beirat (Scientific Subcommittee, SSC)

Der Geltungsbereich des SCC bezieht sich auf die Förderung der beruflichen Kompetenz der EAHM-Mitglieder. Der Beirat gewährleistet außerdem das wissenschaftliche Niveau und die wissenschaftliche Bedeutung der Themen der verschiedenen von der EAHM organisierten Aktivitäten.

Die Mitglieder des SCC für den Zeitraum 2010-2014 sind:
Gerry O'Dwyer, Präsident (IE)
Ugo Luigi Aparo (IT)
Matthias Bracht (DE)
Kristof Eeckloo (BE)
Rolf Gilgen (CH)
Doris Gillig (FR)
Asger Hansen (DK)
Paul Junck (LU)
Jørn Koch (DK)
Danielle Rossi Turck (BE)

Beirat der „Europäischen Angelegenheiten" (Subcommittee „European Affairs", SCEA)

Die Ziele der SCEA sind unter anderem das Fördern des Zusammenwachsens der Krankenhaussysteme verschiedener Europäischer Länder als Basis für den Aufbau eines Sozialen Europa. Weiters soll die Legislatur der Europäischen Union bezüglich des Krankenhaussektors beeinflusst werden, um im Endeffekt eine Brücke zwischen Europa und dem Krankenhausmanager zu bauen.

Die Mitglieder des SCEA für 2010-2014 sind:
Marc Hastert, Präsident (LU)
Gediminas Cerniauskas (LT)
Richard Dooley (IE)
Victor Herdeiro (PT)
Oly Ilunga Kalenga (BE)
Marino Maligoi (DE)
Mieczyslaw Pasowicz (PL)
Corinne Séneschal (FR)

Redaktionsbeirat

Der Redaktionsbeirat stellt den Inhalt dieses Magazins zusammen, welches fünfmal im Jahr erscheint. (E)Hospital spielt für unsere Mitglieder eine wichtige Rolle für den Erfahrungs- und Informationsaustausch in Bezug auf das Krankenhausmanagement.

Die Mitglieder des Redaktionsbeirats für 2010-2014 sind:
Nikolaus Koller, Präsident (AT)
Juraj Gemes (SK)
Ann Marie O'Grady (IE)
Cédric Arcos (FR)
Freddy Iemants (BE)

Aufruf zur Teilnahme an der Erhebung von Zahlungspräferenzen

In Zeiten, in denen sich Gesundheitssysteme weltweit bezüglich Kosten und Qualität immer neuen Herausforderungen stellen, werden Zahlungsmethoden zur Vergütung von Gesundheitsdienstleistern und für die Investition in Betreuungsleistungen genau überprüft. Politische Entscheidungsträger untersuchen und / oder implementieren zunehmend innovative Strategien, die den Umfang und die Kriterien der Zahlungen im Gesundheitsbereich verändern.

Trotz der immer stärkeren wissenschaftlichen Beweislage hinsichtlich der Auswirkungen verschiedener Zahlungsmethoden werden Gesundheitsdienstleister im Endeffekt je nach Verhandlungsergebnis und Präferenzen der verschiedenen Interessensgruppen (Ärzte, Manager, politische Entscheidungsträger etc) bezahlt.

Eine wissenschaftliche Arbeitsgemeinschaft dreier Europäischer Universitäten (Löwen, Gent und Antwerpen) organisiert derzeit eine Untersuchung, die Europa, die Vereinigten Staaten und Australien umfasst und mehr Licht in diese Angelegenheit bringen soll. Die Studie wird vom 1. Januar bis 15. Februar 2011 durchgeführt und benötigt zum Ausfüllen der Unterlagen etwa eine halbe Stunde.

Gesundheitsmanager, politische Entscheidungsträger, Forscher und Ärzte sind eingeladen, ihre Präferenzen für Zahlungssysteme und deren Auswirkungen zu bekunden. Die Teilnehmer erhalten einen detaillierten Untersuchungsbericht, der die Ergebnisse und Befunde erklärt und Vergleiche zwischen den verschiedenen Gesundheitssystemen und den unterschiedlichen Interessensgruppen anstellt. Die EVKD unterstützt diese Studie und fordert alle Mitglieder auf, daran teilzunehmen.

Um die Studie zu starten:
www.eahm.eu.org/surveys

Maurice Van Oyen

1965 wurde Maurice van Oyen zum Direktor des Sint-Janshospitaals ernannt, ein Krankenhaus mit einer 800-jährigen Geschichte, gelegen im Stadtkern, an einer Stelle, die heutzutage als „Oud Sint-Jan" bekannt ist. In den späten 60ern war er einer der Förderer des Aufbaus eines völlig neuen und modernen regionalen Krankenhauses außerhalb der Stadt, dem „AZ Sint-Jan". Er verblieb auf dem Direktorsposten bis 1991.

Er unterstützte globale Kontakte und den internationalen Austausch sowohl im medizinischen als auch im Managementbereich, eine Tradition, die im Sint-Janshospitaal nach wie vor weiterlebt.

Er war einer der Gründungsmitglieder der EAHM im Jahr 1970 und mehr als 20 Jahre in unserer Vereinigung aktiv.

Mexiko: Management der AH1N1 Krise

Von Gilberto Felipe Vazquez de Anda

2009 brach in mehreren mexikanischen Städten die Influenza aus und führte damit zu einer erheblichen Belastung des ohnehin schwachen Intensivpflegesystems und des allgemeinen Gesundheitssystems. Während der ersten Welle wurden der Mangel an Vorräten, diagnostischen Tests und antiviralen Therapien deutlich. Am besorgniserregendsten war die ungenügende Zahl der Ventilatoren. Um diese unvorhergesehen Krise zu managen, wurde ein Aktionsplan ins Leben gerufen, der für adäquate Ausrüstungsvorräte und für die Schulung von Personal und der Allgemeinbevölkerung über das Virus Richtlinien aufstellte. Innovative Strategien, um Patienten während der Pandemie zu betreuen, wurden angewandt, so wie beispielsweise der Einsatz von Telepräsenz mit Robotern in Krankenhäusern der Außenbezirke. Wie erwartet war das Ausmaß der zweiten Welle der AH1N1 größer als der Ausbruch im Frühling. Jedoch war das Gesundheitssystem besser vorbereitet und der Aktionsplan funktionierte in den meisten Krankenhäusern. Intensivpatienten wurden entsprechend den von einem Expertengremium ausgearbeiteten Richtlinien behandelt. Die Intensivstationen wurden mit infizierten Patienten belegt, und bestimmte Krankenhausbereiche wurden isoliert, um Patienten mit moderaten Symptomen zu beherbergen.

Krankenhaus Katastrophenplan: Sind Sie wirklich vorbereitet?

Von Mike Clumpner, Jim Mobley

Ist der aktuelle Notfallplan Ihres Krankenhauses wirklich ausreichend? Wie bei jedem umfangreichen Plan, kann auch dieser Plan auf dem Papier tadellos aussehen – um dann während der eigentlichen Ausführung völlig zu versagen. Die Katastrophenplanung sollte alle möglichen Bedrohungen umschließen. Krankenhäuser müssen darauf gefasst sein, ein Primärziel für terroristische Attacken darzustellen. Um die Auswirkung einer größeren Katastrophe einzuschränken, müssen Krankenhäuser mehrere Entlastungssysteme haben, um ihre wesentlichen Infrastrukturen zu unterstützen. Krankenhäuser müssen zudem ihre Abhängigkeit von externen Stellen und deren Katastrophensupport einschränken. Auch sollte das Personal routinemäßig gründlich ausgebildet und hinsichtlich der spezifischen Rollen und Verantwortlichkeiten während eines Notfalls trainiert werden. Indem der Fokus auf diese Schlüsselelemente des Katastrophenmanagements gelegt wird, minimieren Krankenhäuser die Auswirkung einer größeren Katastrophe auf ihre operativen Fähigkeiten.

Das Unerwartete meistern

Von Lee Campbell

Als der isländische Vulkan Eyjafjallajokull im März dieses Jahres ausbrach, stand die Nuklearmedizin in Irland fast eine Woche lang still. Die gigantische Wolke aus Vulkanasche führte zu einer Schließung des europäischen Luftraums, wodurch Nuklearmedizinische Abteilungen keine weiteren Lieferungen erhielten. Fionnuala Barker vom St. Luke's Krankenhaus in Dublin erklärte, warum sich diese Situation entwickeln konnte, und wie sie diese Krise meisterten.

Technetium-99m, das am häufigsten eingesetzte radioaktive Isotop für Nuklearmedizin, wird in den Niederlanden hergestellt und dann per Luftfracht nach Irland transportiert. Es ist ein überaus zeitsensibles Material, das pro Tag zehn Prozent seiner Radioaktivität verliert; Krankenhäuser und Reaktoren müssen daher einem strikten Zeitplan folgen. Das Schließen des Luftraums bedeutete eine Umplanung der Patiententermine, vermehrten Druck für die Lieferanten und Überstunden, um den Monate zuvor festgelegten Terminkalender einzuhalten.

Seit der Krise hat das St. Luke Krankenhaus eine Notfallgruppe aufgestellt, die im Falle einer ähnlichen Krise die Situation überwachen soll. Einigkeit herrscht darüber, dass Kommunikation und Planung die Schlüsselelemente für das Managen einer Krise sind.

Beschwerdemanagement

Von Judith Polat-Firtinger

Für Krankenhäuser sind Beschwerdemanagementsysteme ausgezeichnet geeignet, um die Zufriedenheit der Patienten zu analysieren. Der Wiener Krankenanstaltenverbund hat im Jahr 2003 ein Konzept für ein standardisiertes Beschwerdemanagement entwickelt, welches dann 2005 implementiert wurde. Das generelle Ziel des neuen Beschwerdemanagementsystems ist die Verbesserung der Kundenzufriedenheit. Es geht im Wesentlichen darum, negative Erfahrungen im Krankenhaus auf einem absoluten Minimum zu halten, sich der Fragilität dieses Geschäftsbereiches bewusst zu sein und die medizinische Behandlung der Patienten zu verbessern.

Das erste, wesentliche Tool für ein effizientes Beschwerdemanagementsystem ist ein einfacher, niedrigschwelliger Zugang der Beschwerdeeinreichung. Das Personal muss im Umgang mit Beschwerden gut geschult sein, den Patienten und deren Angehörigen zuhören und darüber Bescheid wissen, wann bestimmte Fälle an das Management überwiesen werden sollten.

Krisenfinanzierung: Die französische Erfahrung

Von Cédric Arcos

In Frankreich zählen die öffentlichen Krankenhäuser zu den bedeutenden Wirtschaftsakteuren des Landes. Die intensive Modernisierung und Weiterentwicklung bedurfte eines hohen flüssigen Vermögens, was bedeutete, dass die französischen Krankenhäuser von der finanziellen Krise von 2008 ebenfalls voll getroffen wurden – obwohl ihre gesunde Finanzlage schlimmere Langzeiteffekte verhinderte. Im Laufe, wie sich die Krise weiterentwickelte, wurde es zunehmend schwieriger, Kredite aufzunehmen, da viele Krankenhäuser abgewiesen wurden und sich alsbald nach alternativen Finanzierungsmethoden umsahen.

Das positive Ergebnis der finanziellen Krise ist die neue Beziehung zwischen Banken und Krankenhäusern. Mit der Unterschrift des GISSLER Charts versprachen Banken, das Anbieten von Hochrisiko-Produkten einzustellen und ihre allgemeinen Geschäftsbedingungen vollständig zu erklären. Die Banken sagten außerdem zu, im Management von Verschuldung und Anleihen Transparenz zu zeigen.

Das Dänische Gesundheitsqualitätsprogramm

Von Asger Hansen

Das dänische Gesundheitsqualitätsprogramm ist ein nationales Programm, dessen Aufgabe es ist, eine kontinuierliche Qualitätsverbesserung der gesamten dänischen Gesundheitsleistung zu unterstützen. Die Methode generiert eine anhaltende Qualitätsentwicklung im gesamten Gesundheitsbereich in Dänemark, durch das Anbieten von Qualitätsstandards und das Einsetzen von Methoden, um diese Qualität zu messen und zu kontrollieren. Alle dänischen Krankenhäuser, sowohl öffentlicher als auch privater Hand, arbeiten derzeit an der Implementierung des ersten nationalen Qualitätssystems, DDKM. Bis Juni 2012 sollten alle Krankenhäuser ihre Akkreditierung beendet haben. Zum jetzigen Zeitpunkt sind 24 dänische Apotheken im DDKM akkreditiert, drei Stadtverwaltungen sollen bald folgen.

Investitionen in die Hybrid-Bildgebung

Von Gustav K. von Schulthess

Die Auswahl eines Hybrid-Systems ist wie der Kauf eines Neuwagens. In beiden Fällen fragen Kunden: Erhalte ich dadurch eine Verbesserung? Ist die Technologie ausgereift? Ist es kosteneffizient? Einfach zu bedienen? Macht die Bedienung mehr Spaß? Macht es mich attraktiver?

Eine PET-CT hat einen evidenzbasierten Nutzen und aktuell eine große Anzahl klinischer Indikationen. Die SPECT-CT ist klinisch etabliert, doch erfordern die heutigen Systeme hohe Investitionen in eine Technologie, die großteils brachliegt und daher nicht kosteneffizient ist. Die PET-MR genießt derzeit einen gewissen Hype – allerdings ohne die entsprechenden Daten. Letztlich ist es wichtig festzustellen, dass Gerätehersteller integrierte Bildgebungssysteme lieben, da sie immer zwei für eines verkaufen können; was für die Käufer einen „weichen Faktor" darstellt, könnte für den Verkäufer einen eindeutigen finanziellen Faktor bedeuten.

Energieeffiziente Krankenhäuser

Von Lee Campbell

Krankenhäuser verbrauchen enorme Mengen an Energie, vor allem bei den Geräten und technischen Vorgängen, unter anderem für die 24-stündige Heizung und Beleuchtung, Ventilation, Sterilisation, Wäsche und Essenszubereitung. Eine effiziente Nutzung von Energie und die Umwelt sind in ganz Europa und darüber hinaus weit oben auf der politischen Tagesordnung. Doch wie sieht die genaue Vorgehensweise bei der Einführung energiesparender Methoden und Materialen in Krankenhäusern aus?

Es gibt mehrere europäische und globale Initiativen und Programme, die die Energieeffizienz in Krankenhäusern unterstützen. Der ‚Green Guide for Healthcare' (GGHC) ist ein Werkzeug der Nachhaltigkeit, der erweiterte Umwelt- und Gesundheitsprinzipien und -praktiken in die Planung, das Design, die Konstruktion, die Operationen und Instandhaltung der Gesundheitseinrichtungen integriert. ‚HosPilot' ist eine europäische Initiative für die intelligente, energieeffiziente Kontrolle in Krankenhäusern. Sie konzentriert sich auf die zwei Haupttechnologiebereiche Beleuchtung und HVAC (Heizung, Ventilation und Klimatisierung), die Gebiete mit dem höchsten Energieverbrauch. Die Hoffnung ruht nun darauf, dass die Information Communication Technology (ICT) eine wichtige Rolle in der Senkung des Energieverbrauchs von Krankenhäusern spielen wird.

Das Spanische Gesundheitssystem

Von Natalia Marczewska

Das Nationale Spanische Gesundheitssystem („Instituto Nacional de la Salud"), basierend auf Spaniens Gesundheitsakt von 1986, gewährleistet eine universelle Abdeckung und Zugang zu kostenloser Gesundheitsversorgung für alle spanischen Bürger, unabhängig von deren wirtschaftlichem Stand oder Teilnahme am Sozialversicherungssystem. Das nationale System wurde seit 2002 dezentralisiert, was den regionalen Gesundheitsbehörden die Autonomie gab, die Infrastruktur zu planen, zu verändern und zu aktualisieren. Dies hat zu einer enormen Entwicklung im Szenario der Gesundheitstechnologie geführt, vor allem auf dem Gebiet der Informationstechnologie. Die Reformen, die das System regionalisiert haben, wurden implementiert, um der gesamten Bevölkerung einen besseren und gleichwertigen Zugang zu geben, und somit eine Konzentrierung der Gesundheitsdienste in städtischen Bereichen zu verhindern.

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