Hospital

ASSOCIATION EUROPÉENNE DES DIRECTEURS D'HÔPITAUX
EUROPÄISCHE VEREINIGUNG DER KRANKENHAUSDIREKTOREN
EUROPEAN ASSOCIATION OF HOSPITAL MANAGERS

VOLUME 9 • ISSUE 4/2007 • OCTOBER/NOVEMBER • €15
ISSN=1374-321X

MEDICAL TECHNOLOGY

OR MANAGEMENT

PLUS

- Translation services for healthcare
- Handheld echocardiography
- Focus: Norway

OFFICIAL JOURNAL OF THE EUROPEAN ASSOCIATION OF HOSPITAL MANAGERS

We see a way to deliver 99% uptime on diagnostic imaging and biomedical systems

Proven Outcomes

Recouping days of productivity and millions in revenue.

Proven Outcomes in Health Care.

Cutting costs. Optimizing workflow. Advancing the quality of care. Impossible? On the contrary: We can prove it. Across every clinical setting, we are helping health care become more efficient, more effective, and more profitable. With solutions that apply cutting-edge technology and strategic problem solving. So you can focus on essentials – and make the vision of the fully integrated hospital a reality. These are the Proven Outcomes that are transforming the delivery of health care. Today.

www.siemens.com/medical

SIEMENS
medical

CC-Z915-10-7600

Results may vary. Data on file.

ASSOCIATION EUROPÉENNE DES DIRECTEURS D'HÔPITAUX
EUROPÄISCHE VEREINIGUNG DER KRANKENHAUSDIREKTOREN
EUROPEAN ASSOCIATION OF HOSPITAL MANAGERS

The Evaluation of Hospital Quality in Europe – Towards a European System of Accreditation ?

On the occasion of the general assembly of the EAHM that will take place on 16 November during Medica in Düsseldorf, the EAHM is organising a seminar on the theme of the evaluation of quality, and more precisely, accreditation, an external procedure for evaluation as a potential quality measurement instrument.

This encounter was prepared by the scientific committee of our association. It will give us an insight into the existing systems of quality evaluation in different European countries and the experiences they have undergone. This is important for us. We have noticed that certain systems have been altered and others abandoned because they are deficient or too complicated.

Based on this, we hope to arrive at a European model of accreditation, which our associations can recommend adopting. Since, according to the structure of the European union, healthcare is the responsibility of the member state, this is the only possibility to act on a pan-European basis in this area. The EAHM has appealed to the EU to actively support this initiative, in particular in relation to the European Commission in this domain, which should be known shortly.

The conclusions of a workshop organised by the European Commission on advancing the evolution of the single market have already clearly announced that the evaluation of quality, as well as the comparisons and improvements that ensue, must be considered as very important. From now on, it is necessary 'to arrive at, as a matter of priority, a definition, a measure and an evaluation of quality'.

The initiative launched by the EAHM has numerous advantages. Throughout Europe, hospitals are subject to transformation. Patients demanding higher quality, legal demands, greater financial demands by hospitals in the midst of stagnating, even regressive, public means, the modification of professional agreements for numerous healthcare collaborators, and competition between healthcare providers are just some of the examples of changes that face us. The experiences and the comparison of performance indicators between hospitals appear as a means to avoid possible therapeutic failures by looking for the cause of bad decisions.

A certain number of these counter-performances are not necessarily attributable to the groups of professionals concerned, but are guided by the directives specific to each country. For example, the Dutch Volkskrant published the results of a study carried out by a well-known market research company, according to which the merging of hospitals carried out in the Netherlands would be counter-productive. The financial savings and the efficiency of planning expected from these large commercial entities would not be achieved. On the contrary, more bureaucracy and more management levels would result. This will increase the gap between patient and doctor, and, in consequence, provoke a clear loss of quality. This example shows that it is worth learning lessons from different situations, especially national.

Willy Heuschen

Considering the importance of the question, we are delighted to welcome numerous colleagues to Düsseldorf and to establish this essential foundation for the improvement in the quality of services at a European level.

Willy Heuschen
EAHM Secretary General
Editor-in-chief

EDITOR S NOTE:

You might remember that Heinz Kölking announced in the latest issue's editorial that our magazine was going through a profound transformation: from now on, *(E-)Hospital* will be published in English only, reflecting financial constraints but also the multilingualism of hospital managers!

However, French-speaking and German-speaking readers will still be able to read the editorial and the EAHM news, as well as executive summaries of all articles, in their native language. These sections will be easy to spot: they appear in contrasted colours (blue for French and yellow for German) towards the end of the magazine. We would also like to remind you that articles written in French and German by their authors are also available in their original version on www.myhospital.eu.

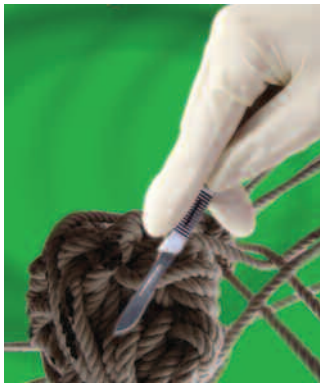
MEDICAL TECHNOLOGY

OR MANAGEMENT

MED TECH

EDITORIAL 1

NEWS



OR MANAGEMENT

Operating areas are frequently pinpointed as one of the main bottlenecks in hospital workflow. Is this situation unavoidable? Not if you believe our authors, who identify factors contributing to this contentious issue and help us see the way out. Christy Dempsey, for example, explains to us pragmatically how her hospital has evolved from a point where operations were being rescheduled and surgeons accumulated overtime, to a balanced and smooth distribution of operations throughout the day.

PAGE 20-28

MEDICAL TECHNOLOGY

Medical equipment is getting more and more sophisticated, hence more and more expensive. Hospital managers are the ones who eventually have to decide what needs to be purchased or not. However, they might not always have the technical expertise or the full body of information available to make an enlightened decision. These few articles could help them determine who can help them in the decision-making process, which innovative products are in the pipeline, and how to structure their procurement policies.

PAGE 12-18

VOLUME 9 - ISSUE 4/2007 - OCTOBER/NOVEMBER

FOCUS: NORWAY

Because of problems within the Norwegian National Health Service (NHS), long waiting lists, and huge budget deficits, a reform was passed in 2002 whereby the central government took over the ownership of all hospitals. They were organised into regional hospital enterprises. This unique renationalisation of the health system is but one of the specificities of the Norwegian health and hospital system. One of its constant goals is also to balance quality with accessibility, as a large share of its territory is located in remote and difficult areas. Let us also point out the common national training programme for hospital managers, organised since 2003 by the regional health authorities. More than 300 hospital managers have by now passed this programme, which consists of an intensive 13-week training period for experienced and talented leaders, focusing on leadership attitudes and tools, relevant to each participant local position.

PAGE 36-44

HUMAN RESOURCES

FOCUS: NORWAY

***(E-)Hospital* is the official Journal of the European Association of Hospital Managers**

Editor-in-Chief and Publisher
Willy Heuschen
Secretary-General of the EAHM
willy.heuschen@eahm.eu.org
General Secretariat:
EAHM
Boulevard du Jardin Botanique, 32
B-1000 Brussels
Tel.: +32 (2) 733.69.01
Website: http://www.eahm.eu.org

EAHM INVITES YOU TO ITS SEMINAR ON NOVEMBER 16TH 2007 IN DÜSSELDORF:

"Quality Assessment Tools in Hospitals – Towards a European Accreditation System?"

The seminar will be held in conjunction with the EAHM General Assembly 2007 and the German Hospital Day, both of which are taking place during the world´s largest medical trade fair, MEDICA.

The seminar is FREE OF CHARGE and will be held in English and German.

To register: please email: josvanlanduyt@eahm.eu.org,
or call at +32 2 733 69 01 for more details.

Pre-registration is required, limited space available.

Preliminary Programme

Part I

10.00 – 10:05 Welcome
Heinz Kölking, *Vice-President of EAHM*

10:05 – 10:20 Introduction
Asger Hansen, *Past-President of EAHM, President of the Scientific Subcommittee*

European (over)view
Moderator: Asger Hansen

10:20 – 10:50
Quality assessment tools in Europe
Dr. Charles Shaw, *Consultant, UK*

10:50 – 11:20
Marquis-project
Prof Rosa Sunol, *Avedis Donabedian Foundation, Spain*

11:20 – 11:50
View of the European Commission on Health care service and quality of care
Dr. Andrzej Rys, *Director for Public Health, European Commission*

11:50 – 12:20
In search for quality
Prof. Vleugels, *Director, Centre for Health Services and Nursing Research, Catholic Leuven University, Belgium*

Lunch

Part II

13:30 – 14:00 Golden Helix Award 2007 –
Presentation of Project Finalists and Announcement of Winner Project

Experiences of Hospital Directors around Europe
Moderator: Asger Hansen

14:00 – 14:30
Experiences from the Netherlands
To be confirmed

14:30 – 15:00
Experiences from Denmark
Dorte Bagger, *Accreditation coordinator, Region Hovedstaden, Denmark*

15:00 – 15:30
Experiences from Germany
Dietmar Nichterlein, *Director, Klinikum Chemnitz, Germany*

15:30 – 16:30
Round Table:
"The Future of Accreditation in Europe"
Moderator: Manel Peiro,
Universitat Ramon Llull – ESADE, Spain

Conclusion
Asger Hansen, President of Scientific Subcommittee

First Seminar Announcement

The European Association of Hospital Managers (EAHM) invites you to a seminar entitled:

ASSOCIATION EUROPÉENNE DES DIRECTEURS D'HÔPITAUX
EUROPÄISCHE VEREINIGUNG DER KRANKENHAUSDIREKTOREN
EUROPEAN ASSOCIATION OF HOSPITAL MANAGERS

"Quality Assessment Tools in Hospitals – Towards a European Accreditation System?"

16 November 2007
Messe Düsseldorf

Join us in Düsseldorf!

To register: please email: josvanlanduyt@eahm.eu.org or call at +32 2 733 69 01 for more details.
Pre-registration is required, limited space available.

ASSOCIATION EUROPÉENNE DES DIRECTEURS D'HÔPITAUX
EUROPÄISCHE VEREINIGUNG DER KRANKENHAUSDIREKTOREN
EUROPEAN ASSOCIATION OF HOSPITAL MANAGERS

Agenda of the 37th EAHM Ordinary General Assembly

to be held on Friday, 16 November 2007, from 5 pm to 6.30 pm,
MESSE DÜSSELDORF, CCD-Ost, Düsseldorf (Germany).

Agenda:

1. Approval of the agenda
2. Approval of the minutes of the 36th Ordinary General Assembly on 31 August 2006 in Dublin, Ireland
3. President's activity report 2006-2007 with information on next Secretary General
4. Tendering of accounts for 2006
   - 4.1. Presentation by the Secretary General
   - 4.2. Auditors' report
   - 4.3. Approval of accounts for 2006 and discharge of the Board and the Secretary General
5. Economic plan for 2008
   - 5.1. Approval of the proposed membership subscription fees of full members and associate members (2.4.c of statutes)
   - 5.2. Approval of the economic plan for 2008
6. Election of auditors for the year 2007
7. EAHM Congress 2008: Presentation of programme and Congress 2012
8. Next Ordinary General Assembly 2008

HEALTH-EU LAUNCHES E-NEWSLETTER

From September 2007, the EU's Health Portal will be producing an online newsletter. Complementing the portal itself, the newsletter will give a selection of the latest news and activities in the field of public health at European and international level.

To bring the work of the EU in the field of public health closer to all stakeholders, whether members of the public or health professionals, the Health-EU newsletter will be hitting inboxes twice a month, giving the latest information in 20 of the EU's official languages, including healthcare action at EU level, future events and conferences on public health, latest publications and new links on the EU Health Portal.

For more details, see:
ec.europa.eu/health-eu/newsletter_en.htm

EU TO STUDY ELECTRONIC CHIPS FOR EHEALTH

The Commission has decided to study the options for using Radio Frequency Identification (RFID) technology in healthcare, with applications ranging from the identification of patients in hospitals to tagging pharmaceutical products.

The Commission recently published a call for tenders for a study on requirements and options for actions in Radio Frequency Identification (RFID) technology in healthcare.

The main objective of the study is to assess the expected features of RFID applications in the healthcare market and to build future scenarios in the field. It is also set to identify possible obstacles and needs for policy actions or specific research activities on the subject.

In healthcare, RFID is used primarily for tagging pharmaceuticals. In hospitals, RFID systems are used, for example, to identify patients and to permit relevant hospital staff to access medical records. The systems are said to save lives, prevent errors, save costs and increase security.

Results of a recent Commission consultation on RFID show privacy, health and environmental risks as the main stakeholder concerns with regard to the use of this technology. As to the use of RFID-based solutions in healthcare, 45% said they were positive about the technology, while 40% said that they had a negative view.

The Commission has also recently launched a procedure to study the economic aspects of eHealth in general, and of economic impact of interoperable electronic health records and ePrescription in particular.

COMMISSION WEIGHS UP OPTIONS ON EHEALTH INTEROPERABILITY

The lack of interoperability in systems and services, such as electronic health records, patient summaries, and emergency data sets, has been identified as a major obstacle to the widespread take-up of eHealth application in the EU.

The Commission has launched a public consultation on the issue with a view to adopting specific guidelines later in the year.

The Commission's notion of eHealth interoperability is two-fold. In addition to the technical definition of the term that relates to connecting systems and exchanging information, it also seeks to recognise the concept of connecting people, data, and diverse health systems, while taking into account the relevant social, political, regulatory, business, industry and organisational factors.

The EU's eHealth action plan (2004) defines the block's priorities on the field until 2010. One of them is the development of interoperable healthcare systems across the Union.

In June 2006, the Commission's ICT for Health Unit adopted a new strategy to promote the transformation of the European healthcare landscape, in line with the Commission's new policy framework i2010.

The Unit is currently in the process of drafting guidelines for good practice on eHealth interoperability.

Pioneers of Vision

Outstanding!
Up to 24-inch
detector diagonals

RADspeed

High-tech radiographic system

- ceiling suspended X-ray tube
- auto-tracking
- high patient throughput
- touchpanel operation
- X-ray tube focus can be lowered down to 35 cm.

Heartspeed

Cardiology system

Opescope

Mobile surgical C-arm

MobileArt

Mobile X-ray system, motor-driven

Sonialvision

High-performance RF universal system, remote-controlled

With its visionary technology, Shimadzu has always offered physicians new possibilities for diagnosis, such as the development of the first commercial X-ray instrument in Japan soon after the discovery of X-rays. Countless patents and world premieres, setting the standard today, have contributed to Shimadzu's leading role in diagnostic imaging.

Shimadzu is also a pioneer in the groundbreaking direct-conversion FPD technology:

- direct conversion of X-rays to digital image data
- cassettes and X-ray films are unnecessary
- much higher image quality and expanded diagnostics
- radiation dose reduced by half
- fully digital and faster data handling
- full DICOM-compatibility.

Direct-conversion FPD is the technology of the 21st century. It is the present as well as the future. Shimadzu's X-ray and fluoroscopy systems are economical, meet the highest diagnostic requirements and are easy to operate.

Shimadzu Deutschland GmbH
Albert-Hahn-Straße 6-10
D-47269 Duisburg · Tel: 0203-7687-0

www.shimadzu.de

SHIMADZU
Solutions for Science
since 1875

EU Autumn Agenda

By Rory Watson

Markos Kyprianou, the EU Health Commissioner, is determined to leave an identifiable legacy as he embarks on the last two years of his Brussels mandate. Late next month, he is planning to present an EU health strategy that will set out the direction the European Union's activities should take in this area in the coming decade. The political statement is intended to set the overall parameters and framework for the individual public health programmes, projects and activities which the European Commission supports.

It will stress that the Commission has no intention of straying into sensitive areas of health policy which are solely the responsibility of national authorities. But it will emphasise the need for a value-based approach and for health considerations to be factored in when decisions are taken in all other EU policy areas. In line with the current emphasis of targeting all policies towards the overarching goal of strengthening Europe's economic growth and job creation, the strategy will emphasise the link between health and economic prospects.

Among the issues it will highlight will be the economic and demographic impact of an ageing population, the possibility of global, pandemic health threats and the use of new technologies in healthcare systems. It will underline the trend towards, and need for, increasing cooperation between national health authorities within a European context and for that cooperation to be extended on a wider international level.

While the health strategy is likely to be broad brush, the same cannot be said for the other issue firmly on the Commission's agenda this autumn: health services. This will have to deal with the detail of healthcare provision in the light of various European Court of Justice rulings, and will focus essentially on patient mobility.

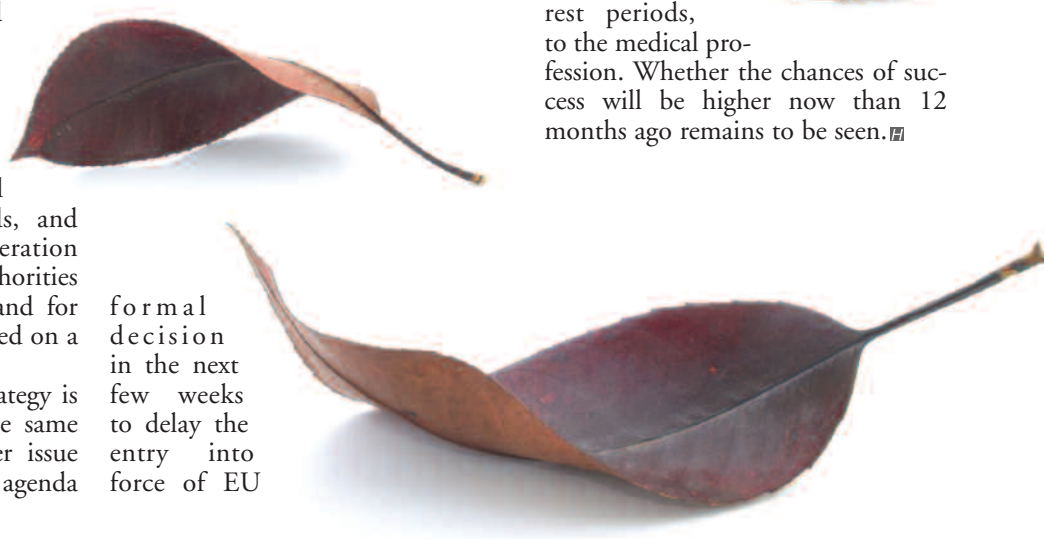
The aim of the initiative, which is expected for late November and will include both legislative and non-legislative proposals, is to provide clarity in what at the moment is a fluid situation so that governments are aware of their responsibilities and patients of their rights.

The legislative element is expected to confirm key principles such as the need for prior authorisation from the relevant organisation if the health treatment abroad is in hospital, but not if it is with a local doctor.

It will establish where the responsibility for a patient's healthcare lies: in the country of treatment where the operation takes place, but in a patient's country of residence for any follow-up that may be required. It is also likely to address the issue of liability. The European Commission is planning to take the formal decision in the next few weeks to delay the entry into force of EU health and safety legislation. Critics have successfully argued the measures could inadvertently restrict the use of Magnetic Resonance Imaging (MRI) and make it harder for medical staff to operate equipment that is used to safely treat eight million patients in Europe every year.

Commission officials indicate that they may be prepared to recommend part of the legislation be amended to avoid the problem. In the mean time, it has written to all EU governments asking them not to implement the measures which are due to enter into force in April next year. The postponement could be for up to 18 months to allow sufficient time to study new evidence due later this year.

Finally, Portugal, which currently holds the rotating EU presidency, has indicated that it will make another attempt (after Finland did so last year) to resolve the vexed issue of the application of the working time directive, with its stipulations on maximum working weeks and rest periods, to the medical profession. Whether the chances of success will be higher now than 12 months ago remains to be seen.



you can

Canon

Canon DR: Nothing compares

Enhance workflow efficiency and speed up patient throughput with our economical and versatile DR anywhere solutions. Less DR rooms are needed compared to conventional technology.
You can cope better with critically high workloads whenever they arise. Just one staff member can handle DR imaging with ease. Only Canon can offer the extensive DR range and the vision to make it all possible. See for yourself: nothing compares.

Whatever situation you encounter as a Radiographer or Radiologist, with Canon Digital Radiography (DR) solutions you can create your images instantly, right where you need them. The world's first portable flat panel detector - the Canon CXDI-31 produces exceptional image quality and combines this with unsurpassed versatility in trauma situations.

The world's largest portable flat panel detector - the Canon CXDI-50G, when connected to a mobile or portable X-ray unit, brings Canon DR technology anywhere that you can imagine; from ICU to operating theatre and from nursing home to rescue scenes - anywhere in the world.

http://medical.canon-europe.com

United Kingdom

Hospital kitchens unhygienic and unclean

Local authority health inspection reports reveal that nearly half of all hospital kitchens and canteens in England could be failing to meet basic standards of cleanliness and hygiene.

Nearly a fifth of hospitals surveyed kept food at the wrong temperature or in unsafe conditions, while 11 hospitals had problems with vermin.

18 hospitals had food that was out of date, putting patients' health at risk.

At a Chester hospital, milk was found stored in the drug freezer in the radiology department. Worst performing hospitals are explicitly named in the report.

France

Report on reduced working hours regime in France

A report was released in July on the impact of the implementation of the 35-hour working week on hospitals.

Even though this mandatory shorter working week brought some benefits to hospital professionals, such as 20 additional holidays, a resting period of 48 hours after a 24-hour shift, and most of all, 3,500 posts created in France.

Unfortunately, the timing of the measure was not ideal, as there are less and less doctors in France.

The consequence is that doctors are still working the same hours and accumulating overtime, which, according to forecasts, would currently amount to the equivalent of between 550 and 800 million euros.

Switzerland

More hospital nurses mean fewer infections

Researchers have examined patients who were admitted to the intensive care unit at the University of Geneva Hospitals in Switzerland; more than a fifth of the 936 patients who received mechanical ventilation during the study developed VAP (ventilator-associated pneumonia). This problem can extend a patient's stay at the hospital by an average 10 days and cost 10,000 to 40,000 euros to treat.

But the researchers noted that when there were fewer nurses on duty, patients were more likely to develop VAP. They propose that employing more than two nurses per patient per day would prevent a large proportion of infections. The nurses' training level has apparently no effect on infection rates.

Germany

30th Deutscher Krankenhaustag

The German hospital days (Deutsche Krankenhaustag) will again take place this year in Düsseldorf on the occasion of MEDICA, the largest medical fair in the world. The theme of the 30th Krankenhaustag on November 14-17 will be "Shaping the Future".

One of the focal points of this event will be the structural impact of the health reform on the hospital growth market. Current reform contributions by politicians and scientists are being questioned and innovative options are brought to light for the future of residential care.

The second day of the congress will be mostly devoted to health policy discussions around the theme "Hospital Takeovers – Growth Limits", as well as to a 'Krankenhaustag' information fair about medical care centres (MVZ, 'Medizinische Versorgungszentren') and ambulatory hospital care.

Over these four congress days, the German Krankenhaustag Society (GDK) expects more than 1,500 visitors from the hospital and health policy sector.

Ireland

Treatment fund for surgery in private healthcare establishments

Given the growing waiting lists for surgical treatments in Irish public hospitals, the health minister has set up a specific "national treatment fund". This fund will finance surgical operations for public hospital patients in private healthcare establishments. In 2007, 80 million euros have been earmarked towards this fund. The prerequisite for a patient to be eligible is to have been taken up on a waiting list for at least three months.

Spain

New health minister

Bernat Soria Escoms, considered as one of the world's leading experts in stem cell research, was named as Spain's new health minister in July 2007. In 2002, he was told by the Spanish government to discontinue his research with human embryonic stem cells, and decided to accept a post as visiting professor at the National University of Singapore to continue his studies, while at the same time continuing research in Spain with mouse stem cells.

Bernat Soria Escoms graduated from the Valencia University and obtained a post-doctorate at the Max Planck Institute for Biophysical Chemistry in Göttingen, Germany.

The World of Health IT

Conference & Exhibition

Connecting Leaders in Technology and Healthcare

'07

22-25 October 2007
Austria Center
Vienna, Austria

Group Rates Still Available
www.worldofhealthit.org

WHIT'07:
The Impact of Technology on Healthcare Delivery

Now in its second year, The World of Health IT 2007 Conference & Exhibition is designed to connect leading health information and communication technology experts from Europe and beyond.

Keynotes include:

- **Dr. Muhaddítha Al Hashimi**
  CEO, Dubai Healthcare City (DHCC)
- **Richard Granger**
  Director-General of IT, NHS, England


Muhaddítha Al Hashimi


Richard Granger

CONNECT CONTRIBUTE CAPTURE

BUYERS – USERS – PROVIDERS – REGULATORS – VENDORS

www.worldofhealthit.org

Main Sponsors

AGFA HealthCare
clinicalsolutions
Initiate
InterSystems
Maccabi
ORACLE HEALTHCARE

Media Partners

DIAGNOSTIC IMAGING EUROPE
eHealthNews.eu
Healthcare
Hospital
E-Health Insider
HealthEuropa.net
HEALTHCARE IT
HOSPITAL INFORMATION TECHNOLOGY EUROPE
ÖKZ
IMAGING Management

Supporting Partners

Apoteket
BCS
CHIME
ETSI World Class Standards
IHE
PGEU GPUE
CHIRAD

European Commission
Information Society and Media

HIMSS

European Secretariat:

EuroRec
European Institute for Health Records

COCIR

EHTEL
European Health Telematics Association

HINE

Other organisers serving as advisory bodies to the EC include:

CPME

EHMA
European Health Management Association

hope
European Hospital and Healthcare Federation

IT and medical technology pulling together

The Klinik am Eichert in Göppingen (Germany) breaks new ground

by Joachim Hiller and Timo Baumann

Figure 1 shows a typical medical product from this new generation with the associated software components.

Information technology and biomedical technology are subject to constant adaptation. This is particularly clear in the field of biomedical technology with its orientation on the narrow level between natural sciences and medicine. Reduced to a common denominator:

"The patient should benefit as soon as possible from a technological advance."

This therefore calls for an interdisciplinary team consisting of IT and biomedical technology to implement the rapid leaps in technology that industry requires of the health sector.

Biomedical technology in changing times

From classic precision engineering, the orientation of this specialist discipline has changed totally and is today found more in mechatronics.

The absolute necessity to open up to IT came about concurrently with the use of standard IT components such as PCs, network technology and database applications, etc., in nearly all areas of medical technology.

IT in the patient environment

Classic IT components automatically become medical technical components when used in the health sector and especially if used in close connection with the patient.

Marketing, operating and using these IT components suddenly came under the rules of EN 93/42, in Germany, the MPG (the Medical Products Act) and the MPBetreibV (the Medical Products Operators' Ordinance) as the legal basis and IEC 60601-1-1 with regard to electrical safety.

This requires an enormous amount of specialist knowledge that *de facto* can only be understood and implemented by biomedical specialists.

Specialist departments link up

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

A few figures

Both organisational units in the Klinik am Eichert distribute the tasks as follows:

- approx. 4,700 active medical products from approx. 250 different producers are supplied mainly by the medical technical service centre.
- approx. 40 software applications with 1,500 IT appliances and their 2,100 users and 42 current IT projects represent the remit of the SCIO (Service-Center Informationstechnologie und Organisation - *Service Centre for Information Technology and Organisation*).

Organisational measures

Service Level Agreements form the basis of the organisational cooperation for joint projects.

In these, functional and administrative activities and responsibilities are set out in writing in an object-related manner.

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

The teams grow together

It is not possible to bring together colleagues from both disciplines in a purely organisational context. This is a question of personal identity. An IT employee will never become a medical technician or vice versa.

The greatest challenge is consequently creating human harmony that enables interdisciplinary team building.

A bi-monthly regular meeting on performance level has been implemented. Here, subjects that need to be dealt with top-down are on the agenda, e.g., the collection of current themes and their prioritisation, or the distribution of employee resources among the actual projects.

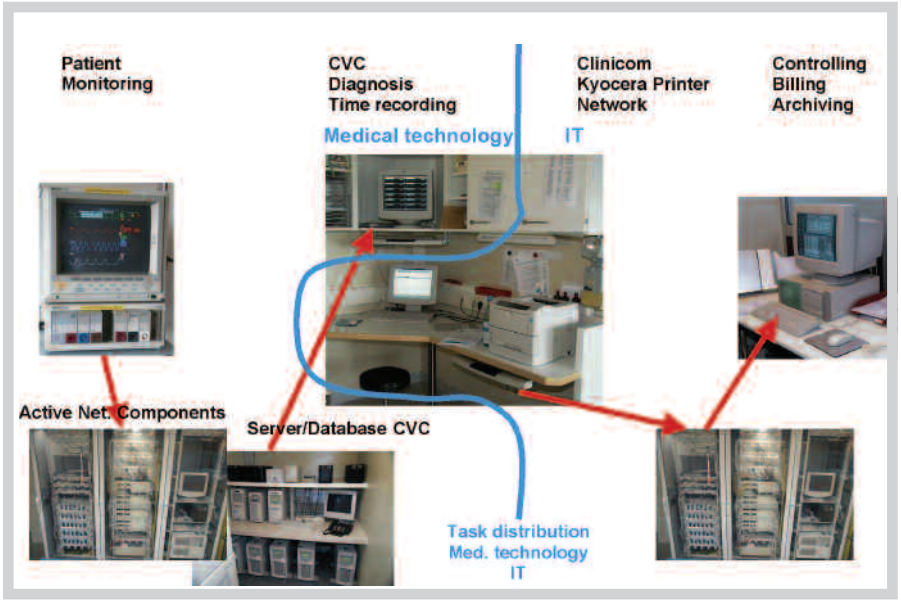


Figure 2 shows an intensive support point with all subcomponents The tasks of biomedicine interact with those of IT like a jigsaw!

Staff from both departments rotate for the daily briefings, twice a week. This already makes for an enormous exchange of experience!

Joint training sessions complete the specialist further instruction in a bottom-up manner.

Summary

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

AUTHORS:
Timo Baumann,
Head of Department Service Centre IT and Organisation,
Klinik am Eichert, Göppingen, Germany
Email: timo.baumann@kae.de

Joachim Hiller
Head of Biomedical Department,
Klinik am Eichert, Göppingen, Germany
Email: joachim.hiller@kae.de

MOLECULAR IMAGING, A DIAGNOSTIC REVOLUTION

Jmaging technology has experienced several major breakthroughs in the past twenty years and has undoubtedly become one of the most innovative medical specialties. Another major leap into the future is underway with molecular imaging. As it will affect the quality of healthcare, patient outcomes and obviously hospital workflows, it is essential for hospital managers to learn about it right now and get practical information about budget and training requirements, as well as general implications of this new diagnostic tool.

Dr. Shahram Hejazi, President, Carestream Molecular Jmaging, a division of Carestream Health, Jnc. (formerly part of Kodak), tells us more:

Doctor Hejazi, how would you explain molecular imaging to a non-medical audience? What is the added value of this new tool?

Jn a nutshell, molecular imaging is a technology that detects diseases earlier and faster. Where it takes months or even years for a classic X-ray to visualise a tumour, for instance, optical molecular imaging offers a visualisation of cellular functions and detects an anomaly much earlier, in a matter or days or weeks, making it easier to treat. Jt allows medical specialists to see the actual activity of cells, and also to determine whether a tumour is benign or cancerous, which is very difficult with conventional imaging technologies.

One of the obvious applications is oncology, as mentioned with the screening of tumours. Are there others?

Of course. Molecular imaging has numerous applications. Jn addition to use in oncology, it is useful for cardiology, dermatology, and for studying diseases such as Alzheimer's, arthritis, and many more.

Are we talking about a science-fiction type of technology, something that we could contemplate implementing in twenty years or so?
Not at all. Optical molecular imaging has already been used for a number of years for medical research on animals. Pharmaceutical companies are using it to validate their drug research on animals, and are expected to start human trials in about two years. The work in human trials will then pave the way for widespread clinical use and then this technology should be available to hospitals all over the world.

Jn the United States, you mean?
Absolutely not. Europe is absolutely not lagging behind the United States on this issue; countries such as the United Kingdom and Germany are actively involved in the development of molecular imaging.

Has it been approved yet by FDA (Food and Drug Administration, the U.S. government agency in charge of approving medical devices)?
Jt will certainly be approved in due time, as the certification process will be initiated shortly. Besides, the FDA continuously issues measures and guidelines to expedite the lengthy approval process for devices or technologies which can crucially impact public health and the welfare of patients.

At this point, European hospital managers probably want to know what kind of equipment they would need to purchase in order to be able to use molecular imaging.
That is the good news. Relative to other modalities, molecular imaging does not require huge and expensive machinery, special rooms, or even shielding. All hospitals will need to acquire are small, transportable pieces of equipment, a moving arm maybe, and chemical agents comparable to current contrast agents. These chemical agents are not radioactive, they are harmless and easy to use.
Again, this equipment and the whole technology are extremely easy to incorporate into the hospital workflow, unlike other imaging tools such as PET scans, for instance.

What about the budget? As you know, hospital managers need financial information too, to be able to determine what they can and will buy.
Jt is hard to give you precise figures or even a range of prices at this point, but optical molecular imaging equipment is definitely far less expensive than a PET machine, for example. Jts cost will probably be more in the range of ultrasound equipment.

Jf hospitals decide to buy the equipment, will they be able to use it right away? Will their staff be able to operate this new machinery, or do they have to budget for training sessions as well?
Definitely not. Not only is molecular imaging easy to install and relatively inexpensive, but it is also much simpler to operate than PET or MRJ, for instance. Jts user-friendliness is close to that of a classic X-ray machine, so hospital managers already know they will not have to spend a fortune on the equipment, or send their staff to long and expensive training sessions, or restructure their imaging department to accommodate large and hazardous machines.

How about the added value of molecular imaging for hospital managers?
Obviously, any technique which allows early and accurate diagnosis will have an impact on the quality of care, on the length of hospitalisations, on their frequency, and consequently on costs and overall patient satisfaction. But ideally molecular imaging will also have a logistical effect on hospital workflow; since the equipment will be small and harmless, it can be easily transported and installed in specialized departments, eliminating the need to move patients from specialists' offices to imaging departments and back.

Again, like ultrasounds, all imaging tests and exams could be done in the same place, which will revolutionise hospital structures and workflows.

Also, J would like to reassure hospital mana-gers; historically, we know that bringing a new modality into widespread use can be extremely time-consuming and expensive, such as the implementation of MRJ or PET has been for hospitals in the past. The application of optical molecular imaging will most certainly be much smoother, partially because it will expedite the path for drug development and will be driven by pharmaceutical companies. Since they are using the technology for the validation of their products, they will help expedite its adoption from both a therapeutic and insurance perspective for widespread clinical adoption. This is a significant distinction from the other modalities that have been introduced in the last 20 years.

J also want to add that Carestream Health is one of the top world players in optical molecular imaging. We offer customers complete molecular imaging solutions including full-featured systems, imaging (chemical) agents, and application expertise all from a single provider.

THE FRENCH CLINICAL ENGINEER

A key ressource to manage biomedical equipment in the hospital

By Martine Decouvelaere

Among hospital engineers of all specialties, approximately 540 work part- or full-time as clinical engineers (CE) in French hospitals, who work as qualified technical managers, with health professionals and hospital executives to build and to operate the medical equipment policy of the hospital, thus contributing to the safety and efficiency of care.

This paper presents the present state of the clinical engineering profession in the country, according to a survey that A.F.I.B. undertaken in 2006 [1], as well as some future trends for these professionals.

CLINICAL ENGINEERING TODAY

In a French hospital or clinic, the role of the clinical engineering division (CED) is to manage medical equipment, from planning to scrapping:
- to advise or to contribute to new hospital design,
- to purchase medical equipment, including planning, buying, specifying implementation constraints, checking new delivered equipment,
- to manage the maintenance, replacement and scrapping of medical equipment.

The CED, most often part of the technical and/or logistics and purchasing department, is answerable to the hospital chief executive.

Indeed, the main results of the A.F.I.B.'s 2006 survey are the following, drawn from 118 answers among over 400 clinical engineers questioned. Among those answers :
- 95% had 5 or more years' post-"baccalaureat" study,
- 54% of the respondents had worked 10 years or fewer,
- 33% worked less than 70% of their working time as CE; the other activities included mainly hospital quality assurance, building, information systems and networks, or logistics.

CE work mostly (over 63%) in several domains, among them intensive care and anesthesia, operating theatre, medical imaging, functional explorations, clinical laboratory.

CE in French hospitals are in charge of:
- for 93% of the respondents, equipment plan ning and purchasing, which takes up 40% of their working time,
- for 79%, team management and leadership, which take 13% of the time,
- again for 79% of the respondents, advice and contribution to projects of new or renovated hospital buildings, for 13% of the time,
- for 67%, maintenance and technical control management, for 11% of the time, including safety of medical devices ; 44% said they were in charge of radiation protection as far as equipment is concerned.
- Quality assurance (54% respondents – 5% time) and contribution to hospital strategy (47% respondents – 4% time) are the main other activities quoted.

The mean size of the CED is 10,3 people, among which 2 engineers, 6,7 technicians and 1,5 administrative staff. The proportion is 1 engineer for 3,35 technicians,

22 CONGRESS

22ème Congrès de l'Association Européenne des Directeurs d'Hôpitaux
22. Kongress der Europäischen Vereinigung der Krankenhausdirektoren
22nd Congress of the European Association of Hospital Managers

25. - 26. 9. 2008

www.evkd-kongress2008.eu

French | German | English

New Leadership for New Challenges

Grazer Congress | Austria

slightly more than in a former survey conducted in 2002 in France [2].
Finally, a mean of 1 engineer for 342 acute beds is noticed, yet a wide dispersion of this ratio is still to be explored.

Besides a slight increase of the mean number of individuals per service, these results confirm the missions and the position of CE in French hospitals, working with health professionals as interface between them and hospital executives to manage the medical equipment assets of the institution.

FUTURE TRENDS

Environmental changes
In order to draw some future changes for the CE, we have to consider the trends in medical technologies, of citizens' expectations about their health and the way care is delivered, and finally of the engineer's job itself.

Engineers are trained to cope with technological changes, but some major breaks seem to be on their way, supported by information technology, genetics and molecular diagnosis and therapy, and nanotechnologies. These will lead to new ways of diagnosing, monitoring and treating – possibly remotely – that are adjusted to the individual patient.

There is also a trend towards concentration of medical technology in the design of new hospitals, for safety or economic purposes, and also due to the shortage of qualified medical and nursing staff. Moreover, safety and security concerns on one hand are increasing citizens' expectations, and economic considerations on the other hand are more and more critical as health expenses grow.

Finally, a general trend for all engineers themselves is that they will have to add human skills to technical qualifications, in order to manage teams of different origins towards a common goal. This implies adding organization and management competences to technical knowledge.

A future for clinical engineering
Clinical engineering is, and will continue to be, a strategic position in the hospital. Indeed, medical equipment is a major issue for medical strategy.

The knowledge and skills of the clinical engineer allows him/her to help hospital executives address strategic or practical issues such as :
- Which technical resources are necessary, and which are the most efficient ones to achieve the medical performance our hospital needs to achieve?
- Which equipment is the most appropriate, in terms of performance and use, at the lowest cost, for our given medical need?
- What is the breadth, the best organisation and the cost of the maintenance plan needed to assure safety and appropriate operational availability of medical equipment in our facility?

Moreover, the clinical engineer serves the entire hospital interest, and can thus suggest organisational changes in order to increase efficiency of medical equipment use.

It seems to us that the major trends for the CE' mission and role are the following :
- Information systems and networks skills will be necessary, as most pieces of medical equipment include computers, tend to be linked together and can be connected to the Hospital Information System;
- Technology assessment is a concern to be aware of, as medical technology efficiency will be challenged by health authorities, governmental organisations, and patients themselves. This is an opportunity to show the engineer's ability to cope with methodological reasoning;
- Monitoring of technological development is a major part of clinical engineering added value in hospitals, and should be sustained and developed;
- The development and spreading of medical technology offers opportunities for clinical engineers to move towards different positions: technical expert, maintenance manager, project manager, …

Other opportunities, which are a reality for some of our colleagues, lead on one hand to managing responsibilities in Imaging and/or Laboratories departments. We can also foresee opportunities such as operating theatres management.

On the other hand, CE will probably be needed to run sophisticated medical equipment, as technology exceeds healthcare professionals' specific skills. Finally, it is highly probable that research teams will need more engineers as the technological level is steadily increasing.

We can thus foresee opportunities for the development of clinical engineering in France, as clinical research, technology assessment and efficiency become challenges for the healthcare community. Engineers will need to show human intelligence and management abilities to continue to contribute to efficient patient care using technology.

References are available at english@hospital.be

AUTHOR:
Martine Decouvelaere
President of the French Association of Clinical Engineers,
Hospices Civils de Lyon, France
Email: martine.decouvelaere@chu-lyon.fr

Coming in 2008!

CARDIOLOGY MANAGEMENT

The Management Journal for Cardiologists

Free Subscription for *(E-)Hospital* Readers

Free subscription is available to all readers of *(E-)Hospital*. To receive your issues, please go to www.cardiologymanagement.eu and click on „SUBSCRIBE"

Cardiology Management is the only hard-copy journal focusing on best practice in management in cardiology departments across the world. Distributed four times per year, this journal is tailored to meet your information needs on the latest best practices in management topics, such as staff, financial and IT-related management issues. Sections include:

- **EU News** – Covers developments at an EU level that are relevant to cardiologists
- **Industry News** – The latest updates from industry mergers, acquisitions and new technology propositions
- **Cover Story** – Addresses hot topics such as patient safety, quality assessments, staff training and performance and managing financial resources
- **Features** – Updates from cardiology managers around the world
- **Management** – Practical and informative guides to the latest management practices
- **My Opinion** – Interviews with leading experts in cardiology management

Call for Abstracts!

Please submit all management-related abstracts to Managing Editor Dervla Gleeson at dg@cardiologymanagement.eu before November 16, 2007. A full list of desired topics is available from our website.

Visit us at **www.cardiologymanagement.eu**

RESPONSIBILITIES IN THE HIGH-COST AREA OF OPERATING THEATRES

On Theatre Management, Conflict and Potential Solutions

By Holger Otto

Criticism of hospitals is a common theme in the ongoing debate on German health policy. While critics frequently accuse the health service of being too expensive, inefficient and hampered by hierarchical structures, they seldom mention the high standards of medical care available and overlook the fact that these high quality services are available to every German citizen. Will this situation continue indefinitely? Professor Rainer Saalfeld, a senior executive at McKinsey & Co. in Munich notes that new treatments are emerging at a much faster rate than our ability to finance them. Mounting constraints on financial resources call for new ideas and approaches and this applies equally to the hospital sector.

To survive in the era of diagnosis-related groups (DRGs), hospitals must increase productivity, adopt leaner processes and reform organisational structures without abandoning their ethical responsibility towards patients. Having been identified as an area of high cost, structural change is also necessary in operating theatres where highly-qualified staff from many disciplines co-operate in a confined area and consume substantial material resources. The unwritten rules that have applied in theatres have in some cases caused problems such as long idle periods, high levels of overtime and excessive inpatient stays. In the current climate, treatment processes in operating theatres must be optimised. Alongside high-quality nursing and medical care, the efficiency of a hospital is significantly enhanced when operating room processes are tightly organised. Good surgeons, anaesthetists and nurses are essential for high quality, but a new type of employee, operating theatre co-ordinators and managers, are needed to assume responsibility for ensuring operating theatre processes are efficiently organised.

Who is best suited to fullfil this new role? Anaesthetists appear to be a particularly good choice because they have an interdisciplinary insight into the operating theatre environment. In addition, their medical role allows them to assess organisational requirements in medical matters. It has become clear, however, that the new posts do not need to be filled by clinicians. Many nurses have acquired the appropriate advanced training to make them perfectly suited to the role. The fundamental pre-requisite for candidates is an excellent knowledge of operating theatre procedures.

Theatre co-ordinators and managers

The theatre co-ordinator plans and directs the day-to-day activities of the operating theatre. He/she is responsible for the smooth running of the unit and the integration of emergency cases. Capacity utilisation must be maximised, and personnel and material needs planned in a manner appropriate to requirements. Hospitals with decentralised surgical units may employ several theatre co-ordinators. The theatre co-ordinator position may be filled by a clinician or a qualified nurse. They must however have excellent knowledge of operating theatre procedures.

The theatre manager, in most cases a doctor or member of nursing management, is directly accountable to the hospital board and is responsible for developing long-term strategy for the surgical unit. His function includes all tasks associated with managing and directing an operating theatre.

Besides day-to-day management functions, these include supply management (stores, orders, equipment and personnel), administration (service statements and cost control), quality management and ensuring compliance with legal requirements. When budgetary responsibilities are transferred to the theatre manager, the unit becomes a separate cost centre in the hospital. Management outcomes also improve when hospital management and theatre managers agree a set of specific goals.

Conflicts and potential solutions

The new responsibilities created by the deployment of theatre managers may cause conflict, sometimes of a serious and/or personal nature. For theatre management to be successful, it is vital therefore that senior management lends its full support to the theatre manager long after he assumes his duties. Management must state in no uncertain terms that it is fully behind the theatre management concept and must also define how it is to function.

Power is often confused with hierarchy. Conflicts related to status should not arise because the theatre manager does not enjoy a higher position in the hospital hierarchy than the surgeon. He/she is responsible for ensuring activities in the operating theatre run smoothly and has, therefore, the power to issue instructions. He/she allocates the personnel and material resources available to the department, compiles statistics and evaluates and optimises work processes.

The hospital should draft a charter codifying the rules governing routine co-operation in the operating theatre. This should be circulated among all relevant staff who must accept it as binding in terms of how they perform their function.

Drawing on operating theatre procedures, the charter codifies the precise tasks, competences and responsibilities of all those engaged in theatre activities. It also stipulates the course of action to be adopted in the event of conflicts arising.

To help win widespread acceptance, the charter should specify a timeframe for revisiting and updating its provisions. Consultants and nursing managers should have a role in drafting the charter and should sign it together with senior hospital management.

Successful operating theatre management requires the establishment of clearly-defined organisational structures as a basis for the unit's activities. This includes an explicit statement that a single individual may assume overall responsibility for the operating theatre. An organisational chart may help clarify at what levels decisions are to be taken and implemented.

Some hospitals have established an operating theatre steering group, usually consisting of representatives from anaesthesia, surgery and nursing. The advantage of this approach is that it inhibits the emergence of sectional interests and encourages the various actors to work as a single unit. Under this model, staff tend to be more receptive to decisions. One of its drawbacks is that the large number of people involved is not conducive to quick decision-making.

For some years now, Rendsburg Hospital has been successfully managed by one of Germany's leading private hospital management companies, SANA Kliniken GmbH & Co KGaA, Munich. Two years ago, as part of a restructuring project in its operating theatres, the hospital established the position of theatre co-ordinator. As no applications for the post were forthcoming, management decided to advertise the position externally. The job requirements, which include management functions, were: completion of specialist medical training; several years experience in an operating theatre setting; proven organisational, conflict resolution and team skills; assertiveness; analytical ability; and computer literacy.

Besides technical competence, theatre managers must be able to foster harmonious co-operation between the various occupational groups engaged in theatre work. The successful candidate in

continued on page 28

Instrument and Benchmark for Hospital Mangers

important

Successful Start of the Study "Trends in European Hospital Management"

In the last edition of *(E-)Hospital* we announced the start of the survey "Trends in European Hospital Management". Therefore we enclosed a letter to every subscriber of *(E-)Hospital* as personal invitation to participate in the study. We are very happy that hospital managers all over Europe already supported the study and filled out the short online-survey. All participants will get the analysis of the data for free. The study will enable hospital managers to benchmark their own institution in areas such as staffing level, medical equipment, organisational structure, funding, only to point out the most important aspects of the study.

This study will give hospital managers a pivotal instrument for strategic alignment but depends strongly on their support and attendance. The well-setup online survey allows you to share information and express your opinion and expertise in less than 15 minutes.

As reward for your participation you will receive the outcome data worth a lot of money on the information market as well as the possibility to win the latest Apple iPhone.

The survey is available in three languages, English, French and German, until 31 October 2007. The anonymity of the data is guaranteed.

The results will be presented during MEDICA and around that date all participants will also receive their own copy of the study on a handy USB-stick. The winner of the price draw will also find a new Apple iPhone in his mailbox.

To participate in the survey, please use the link and the password of the enclosed letter in *(E-)Hospital* or go directly to the project website: www.easurvey.com/hospital

If you have questions, or require additional information, please contact:

Christian Marolt
Publisher *(E-)Hospital*
Email: cm@hospital.be

Carsten Hutt
Emergent Actio KG
Mühlegraben 14
D - 79271 St. Peter
Tel.: +49-(0)7660-920072
Fax: +49-(0)7660-920073
Email: carsten.hutt@emergent-actio.de
URL: www.emergent-actio.de

➥ Compare your establishment with others in your country and in Europe!

➥ As you well know, the existence of your establishment depends on the evolution of the market.

(*E-)Hospital*, in collaboration with Emergent Actio KG is carrying out a survey about "The Interaction Between Hospital Management and Medical Technology".

The objective is to show the principal trends in hospital management and to bring out new management techniques and ideas to run your hospital better.

The participation is electronical, fast, simple and non-bureaucratic with a few multiple choice questions easy to complete.

Please find your password in the adjoining letter and fill in the questionnaire online on: **www.ea-survey.com/hospital**. Hurry up: the survey will only be available until 31 October 2007.

The study will benefit your daily work but will also offer you a long term vision on the future of your establishment. You will get for free a custom-tailored analysis of the data and you have a chance win the latest iPhone.

CREATING A COLLABORATIVE MODEL TO IMPROVE PATIENT FLOW

By Christy Dempsey

With strategic focus on improving the quality and safety of patient care, it has become increasingly obvious to both physicians and hospital leadership that improving patient flow and communication between care providers is the foundation upon which better patient care is built.

Perioperative services, and the OR specifically, are a key focal point for improvement strategies. Costly technology and high utilisation of both human and supply/equipment resources coupled with the significant volume of elective admissions to the hospital make this the primary area for improving patient flow. St. John's Regional Health Center in Springfield, Missouri embarked upon on a significant and successful performance and quality improvement strategy. St. John's Regional Health Center is a 866-bed, community hospital located in southwest Missouri in the US. Twenty-six operating rooms in the main hospital and 8 ambulatory surgery rooms provide for the 31,000 cases annually.

Perioperative services guidance team

As an integrated delivery network, the physicians partner with the hospital in strategic initiatives. However, the dichotomy between physician and hospital needs are the same in an integrated model as in a private practice model and communication and collaboration are as, or more, important.

The driving force for the collaboration between physicians and hospital leaders is the Perioperative Services Guidance Team. This team consists of seven surgeons, an anesthesiologist, materials manager, and the nurse managers from each area of Perioperative Services: OR; PACU; AM Admissions/Pre-admission Unit; and Ambulatory Surgery. The group is co-chaired by a surgeon and a nurse. This multidisciplinary team meets bi-monthly and is responsible for reviewing all issues associated with the implementation and monitoring of all initiatives related to surgical services. Attendance is not required and not paid. However, virtually 100% attendance is enjoyed, thanks to the collaboration and transparency, as well as the ongoing progress made by this group. As a result, this committee has become very powerful within the organisation. The physicians and hospital leadership in the group review financial information, scheduling issues, physician conflict, capital and operating budget planning, and make decisions after review of all relevant information. The hospital senior leadership supports this group and enables the decision-making authority.

Separation of scheduled and unscheduled cases

The primary methodology used for performance improvement is the Institute for Healthcare Improvement's small tests of change and rapid cycle improvement. Instead of collecting and analysing data for years before implementing any change, small sample sizes and rapid improvement strategies are evaluated on a dynamic basis. Successful strategies are implemented on a wider scale. An unsuccessful strategy is altered and re-evaluated. This dynamic process assures active participation and the very real perception of progress. The group then becomes a team of passionate change agents who identify opportunities for improvement and obstacles to progress.

One of the first and most influential initiatives undertaken using this methodology began in October 2002. Dr. Eugene Litvak, a professor of operations management with Harvard and Boston Universities, presented data and theory to support separation of scheduled and unscheduled cases, in order to reduce artificial variability. St. John's at that time was close to 100% blocked with elective surgical scheduling. There was little "open" time for scheduling and competition for any available OR time was prevalent daily. The block scheduling rules were consistently enforced and the block schedule was revised every four months based upon utilisation (defined as 'patient in' to 'patient out', plus associated turnover time). Because the schedule was so heavily blocked, add-on cases were started after the blocks ended, usually around 5pm, resulting in add-ons being done late into the evening and at night. Patients were forced to wait for long periods, elective cases were frequently bumped for more urgent and emergent add-on cases, staff overtime was high, and the surgeons were unhappy. As Dr. Litvak had stated, separating scheduled and unscheduled cases would allow more predictability for the scheduled cases and result in fewer bumping or delays providing more flexibility for the overall surgical schedule.

A group of trauma surgeons agreed to release their block for a 30-day, trial period. During this trial, a room was set aside for add-on procedures. The definition of an add-on was critical to the success of this project. Four categories were assigned: emergent requiring the next available room; priority requiring a room within 2 hours; urgent requiring a room within 6 hours; and anything else that

needed to be done within the next 24 hours. Surgeons were responsible for prioritisation of the cases based on the patient's clinical presentation. Any misprioritisation was addressed in the Perioperative Service Guidance Team meetings and penalties assessed by the Chair of the Department of Surgery. The trauma surgeons were assured that if the trial was unsuccessful, their block would be returned.

Add-on room

The add-on room was implemented in November 2002. No cases were allowed to be scheduled into this room until 6am on the morning of surgery. At that time, the add-on cases were slotted into the room based upon the surgeon's priority. We did not want the room to be more than 60% utilised so that the flexibility it provides was maintained. The results obtained exceeded our expectations and these results persist today. The volume of surgery during the "business" part of the day (7am-1:30pm) grew by 5.1%. The need for operating rooms after 3pm decreased by 45%. The surgery department overtime has declined from almost 6% to 2.3% currently. The trauma surgeons who gave up their block realised a 4.5% increase in their revenue because they were better able to schedule predictably in their other block time. Patient, staff, and physician satisfaction improved. In addition, surgical volumes increased up to 33% over five years. These improvements have been sustained since the implementation of the add-on room, and provided the track record of success necessary to continue patient flow improvements.

The success of the add-on room enhanced the trust and collaboration between the hospital and physicians, thereby enabling more complex hospital-wide improvements with even more substantial implications for increasing case volumes and revenues. Smoothing the flow of elective admissions through the OR in order to minimise peaks and valleys in inpatient census was the next step. St. John's smoothed the flow of elective admissions primarily by smoothing the hours allocated to each surgical specialty based upon utilisation. 59% more inpatient capacity was created without adding additional physical beds by working with the surgeons to smooth their elective admissions across the week.

Collaboration, communication, and real-time data-analysis are key to the success and sustainability of any process improvement. By creating a culture of trust and transparency, the physicians and hospital were able to create a "win" for everyone involved.

AUTHOR:
Christy Dempsey, RN BSN MBA, CNOR,
Former Vice-President of Surgical and Emergency Services,
St John's Hospital, Missouri, USA,
Senior Vice-President of Clinical Operations for
PatientFlow Technology, USA
Email: cdempsey@patientflowtech.com.

AMBULATORY SURGERY IN FRANCE: MAKING IT HAPPEN

By Ayden Tajahmady and Maxime Cauterman

Developing ambulatory surgery is a strategic option for hospitals that requires entrepreneurial skills, such as understanding the environment, setting priorities and the ability to take risks. The pressure to reform which French hospitals are currently under offers little incentive to develop such skills in regard to ambulatory surgery.

A new way of financing through DRGs, new clinical governance and new internal organisations are all being implemented simultaneously. The impact of these reforms on the development of ambulatory surgery is important and sometimes contradictory, but little effort is made to promote coherence between them.

This results in a complex environment that is not favourable to change. In addition, the messages that the officials and some professionals deliver on ambulatory surgery are often blurred and contradictory and do not contribute to making the issue clearer for frontline professionals.

This situation tends to deter managers and healthcare professionals from ambulatory surgery. Another consequence is that people are often diverted from the real issues and focus on peripheral ones. For example, many surgeons involved in the campaign paid closer attention to the incentives provided by the payment method than to the arrival time of their patients, or the security of the discharge!

Making it happen: a small venture focused on the day-to-day job

Developing ambulatory surgery is an operational issue as much as a strategic one. Yet in France, no institution or professional society is conveying such a message or providing support for frontline professionals. The opportunity of a neglected operational field was seized and the campaign was designed around a very simple vision: it is up to the health professionals, hospital by hospital, surgeon by surgeon, act by act, to make ambulatory surgery happen.

If one was to find the ideal metaphor to describe an ambulatory surgery unit (ASU), one would consider that of a small venture. We identified that successfully developed ASUs relied on two indispensable actors: the medical manager; and the unit head nurse. The medical manager is the real entrepreneur, it is up to him to recruit new cases and convince his fellow doctors to work with the ASU. The head nurse can be seen as a production manager who is responsible for the quality of care and service offered to the clients of the ASU. Surprisingly, it appeared that the real client of the ASU was not the patient, but rather his surgeon. The final decision between ambulatory and conventional care is made by the latter and he must be the object of the ASU management duo's efforts.

Two axes of intervention: developing the activity and controlling the processes

Managing an ASU requires concentration on two axes: developing the activity and controlling the process of production. It is the responsibility of the medical manager of the ASU to increase activity. In order to do that, he must be able to identify and mobilise growth potential.

The first step, the identification of growth potential, relies on a effective information system. We identified two types of growth potentials: (1) substitution potential, i.e. conventional stays that could have been substituted by ambulatory stays, and (2) grouping potential, i.e. ambulatory stays that took place in a unit other than the ASU.

The second step is to mobilise these potentials and that is when the medical manager must display marketing skills. The medical manager must concentrate on those surgeons who possess the most important development potentials, try to convince them of the relevance of ambulatory surgery and negotiate with them on the number of operations that they are willing to make in the ASU.

It is important that the medical manager maintains a close working relationship, including follow-up, with these surgeons in order to strengthen this partnership.

The second axis of development of the ASU is the control of the production process. This depends mostly on the head nurse's organisational skills. Bearing in mind that surgeons are the main clients of the ASU, the head nurse must ensure that the service provided to them is optimal. In this respect, the arrival and discharge of the patients are crucial issues. So is the programming of the operating theatre. It is a complex issue to decide when ambulatory must be programmed vis à vis other types of surgery.

We observed various types of organisation regarding this issue: some surgeons began their morning programme with ambulatory cases, whereas some alternated ambulatory and "conventional" patients in their schedule. Another type of organisation is to dedicate time slots to ambulatory cases, the ultimate evolution being to dedicate operating theatres. None of these organisations emerged as the best, each one being fit to a certain level of activity, and having its own drawbacks. However, some simple rules could prove useful when a manager is faced with the choice of the most relevant organisation:

- do not add complexity to the planning of medical work time;
- do not create new constraints for surgeons;
- do not create bottlenecks in the recovery room; and

continued from page 21

Rendsburg was a specialist in anaesthesiology who had acquired an excellent insight into theatre processes in his previous role and had some experience in a co-ordination role. Evidence of advanced training in medical quality and theatre management completed his skills profile. The chosen candidate is answerable to the board of the hospital, to which he reports regularly, and is employed in a full-time capacity as theatre manager. Since he took up the post, improvements in the hospital's operating theatres have been measurable. Procedures are better co-ordinated, changeover times have been cut and theatre planning is characterised by clear targets and certainty. When theatre slots become free, this information is communicated to specialist departments for planning purposes. As a result, capacity utilisation is maximised, delivering an overall improvement in cost terms. Nevertheless, conflicts have persisted, although there have been conspicuous and acknowledged improvements in this regard. Taking into consideration the aforementioned problem-solving approaches, continuous efforts are being made to improve theatre procedures and foster greater co-operation.

Theatre management is always a balancing act, both at a human and technical level. It requires sensitivity and resolve, a willingness to compromise and learn, insight and assertiveness as well as a fully transparent approach to decision-making. It is also vital that theatre staff are regularly briefed on developments in the hospital. In Rendsburg for example, internal statistics are provided to senior consultants and heads of department during departmental meetings, while monthly meetings of the operating theatre team are held to encourage theatre nurses and other staff to share ideas and information, and participate in the ongoing improvement process.

Summary

Efficient operating theatre management is becoming an increasingly important issue in surgical units, a high-cost hospital area whose resources are constantly being squeezed. For theatre management to be successful, transparency is vital, clear targets must be set, and staff must have confidence in the theatre manager. In addition to being professionally competent, managers must be able to integrate, possess conflict management skills and have the full support of hospital management.

Well-structured theatre management can make a major contribution to the economic success and future viability of a hospital.

AUTHOR:
Dr Holger Otto, OR Coordination, Kreiskrankenhaus Rendsburg, Germany
Email: holger.otto@kkh-rendsburg.de

- do set priorities in operation planning: general before local, or loco-regional anaesthesias; lower limb before upper limb; clean procedures before contaminated procedure; etc.

The management of patient turnover may well prove to be a challenging organisational issue (programming arrivals, making better use of boxes, waiting rooms and discharge lounge, etc.). Finally, the head nurse is responsible for the satisfaction of the patients. The use of a relevant and adapted dashboard is often a valued tool for head nurses, as well as a basis for the reflections and the decisions of the management duo. The recommended indicators are well known: daily activity (week mean, min and max); contribution of each medical specialty regarding their potential; cancellations (and causes); in-bed unplanned admissions (and causes); patients' satisfaction; D+1 complications, etc.

Results

First, the intervention carried out by the MeaH (Mission d'Expertise d'Audit Hospitaliers) campaign, performed from 2005 to 2007 in 8 hospitals, led to significant improvements in most of the 6 hospitals that had an ASU:

- cancellation rates decreased significantly in 5 hospitals (still rising to 10% in one of them, but inferior to 2% for 2);
- unplanned in-bed admission fell in 4 hospitals (inferior to 1% for three);
- 4 out of 6 hospitals developed their ambulatory activity by increasing the rate of ambulatory surgery and decreasing the "out of ASU" ambulatory surgery.

Second, all the ASU management duos adopted a new vision of their daily work, their position within the hospital and the service they provide to other health professionals. This new vision relied on new tools (dashboards, etc.), new messages to be communicated and a controlled production process that made a daily turnover possible.

Finally, we also built a method, a portfolio of tools and improvement actions, and a clear message to convey.

AUTHORS:
Ayden Tajahmady, MD, MS
Project Manager
Maxime Cauterman, MD, MS
Head of "Pilot" Department
Mission Nationale d'Expertise et d'Audit Hospitaliers,
Paris, France
Email: maxime.cauterman@fr.oleane.com

REDUCTION OF READMISSIONS AND LENGTH-OF-STAY

Use of Telemonitoring in Chronic Heart Failure Improves Clinical and Economic Effectiveness

By Drs Christian Zugck , Janis Radeleff and Lutz Frankenstein

Multiple hospital (re-)admissions for acute decompensation are characteristic of CHF patients, deleteriously affecting their quality of life and imposing a major burden on national healthcare costs. The direct costs of CHF-related hospitalisations amount to 2.7 billion euros per year. Due to the demographic evolution of European societies, the number of hospitalisations is likely to further increase [Figure 1].

Adherence to guidelines will improve survival and reduce hospitalisation rates, thus lowering the socio-economic burden.

However, disease management strategies should not only focus on drugs but comprise means to react to changes of health status and to co-ordinate adaptation of the individual patient to his disease and environment alike.

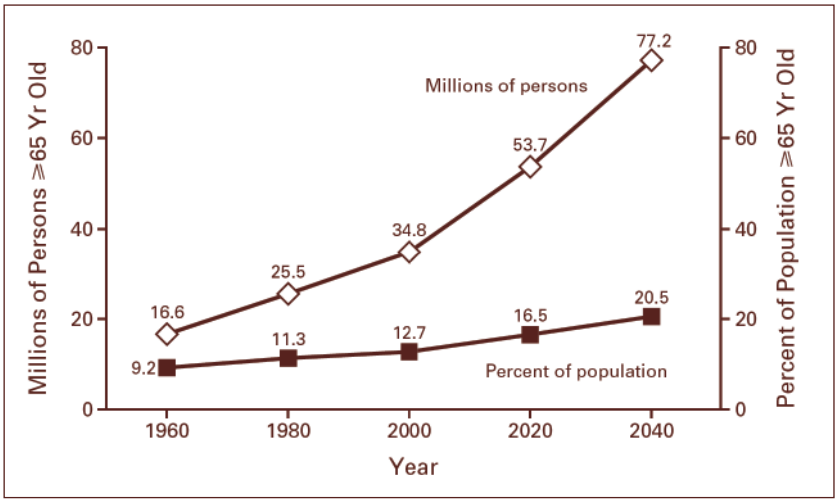


Figure 1: Projected Increases in the U.S. Population 65 Years of Age or Older; Data are from the U.S. Census Bureau; accessed on http://www.census.gov.

Telemedicine could be the key to integrate these prerequisites, to facilitate communication with the patient and between care-givers to reduce overall hospitalisation rates and costs. Furthermore, a recent meta-analysis concluded that telemonitoring may be even more effective at shortening hospital stay than reducing admissions, which would in turn have a considerable effect on hospital capacity needed, patient "turn-over" and patient costs to the hospital.

THE CONCEPT OF TELEMEDICAL CARE

Predefined vital parameters (e.g. weight, blood-pressure, heart-rate) are transmitted automatically via modem to the telemedical centre, that can be contacted 24-hours-a-day ("24/7/365"-concept).

In case individual limits for vital parameters are exceeded an alarm is triggered, allowing for immediate therapeutic action. Furthermore, to enhance medical compliance and to detect changes of the individual health status, all patients could be pro-actively contacted alongside with counselling on nutrition, exercise and drug therapy in consultation with the primary care physician [Figure 2].

THE CONCEPT OF CLINICAL AND ECONOMIC EFFECTIVENESS OF TELEMONITORING

Prospectively, 478 patients were included in the protocol; 270 (men: 85,5%; mean age 62,5 + 10 years; NYHA II, III, IV: 80 vs. 17 vs. 3%; main diagnosis: coronary

10th Annual Management in Radiology (MIR) Congress

Oxford, United Kingdom

...greater involvement and leadership of radiologists in the management of radiological departments...

...a forum for education and exchange of ideas and state-of-the-art concepts on management...

...enhancing the contribution of radiology to medicine...

MIR

MANAGEMENT IN RADIOLOGY

Register online at *www.mir-online.org* to join an international pool of experts sharing management knowledge and experience!

The 10th Annual MIR (Management In Radiology) meeting will be held this year in Oxford, UK from October 10 - 13, 2007.

This unique platform, initiated to address significant managerial issues that affect the medical imaging community from a scientific point of view, offers a wealth of opportunities to exchange experience, introduce new tools and concepts and draw together a wide range of leading professionals, both speakers and delegates. The main topics are as follows:

- The use of information technology: PACS, the electronic patient record, electronic requesting and feedback of results, speech recognition, etc.
- Teleradiology & outsourcing of imaging and reporting
- Payment by results
- Management improvement strategies
- Value-added imaging
- Topics related to all aspects of management in imaging today

www.mir-online.org

heart disease; hypertension; cardiomyopathy) were monitored via telemedical care and analysed in comparison to a matched control collective.

During an observation period of 3 months, hospitalisation (NYHA II, III, IV: 5,2 vs. 2,4; 8,1 vs. 3,0; and 2,4 vs. 1,2), length of stay (NYHA II, III, IV: 50,7 vs. 21,9; 78,4 vs. 27,5; and 23,0 vs. 10,9 days) and number of contacts with the GP (303,7 vs. 83,2), as well as with the cardiologist (105,3 vs. 30,4) were significantly reduced in the group of patients with telemedical care.

Furthermore, increased compliance with a more appropriate adaptation of medication could be clearly demonstrated by standardised questionnaires.

Also, an independent economic analysis demonstrated a significant decrease of CHF-related costs (about 3,000€ per patient per year) in patients monitored via telemedical care, predominantly due to a reduction of hospital days. The results can be seen in Table 1.

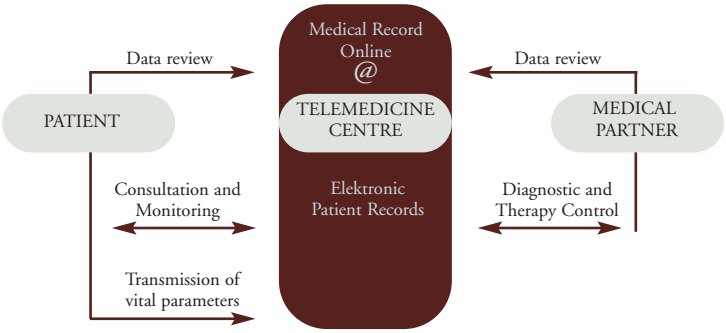


Figure 2:The concept of telemedical care.

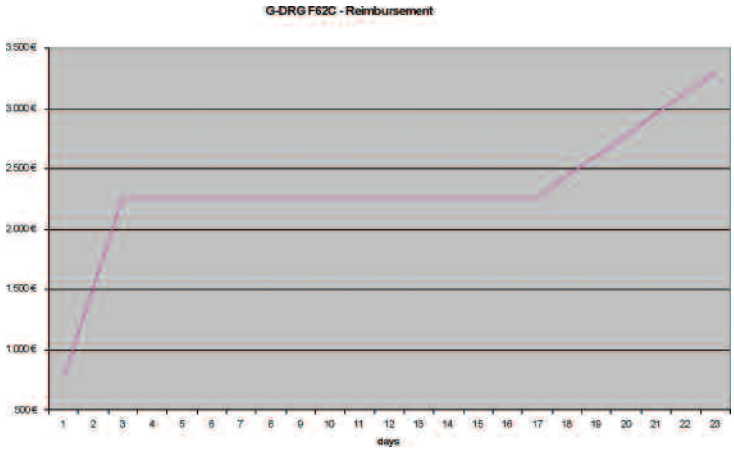


Figure 3:The average length-of-stay for the DRG: F62C (heart insufficiency) is 9 days in Germany. Since the reimbursement per case remains on casemix points and not on hospital days, reduction in length-of-stay by telemedical care could improve the net yield in patients. (Reimbursement for the G-DRG calculated at a rate of 2,800€).

What impact has telemedicine on hospital management?

Since 2004, the German Diagnosis-Related-Groups system (G-DRG) is making a prospective payment system an obligation in the budget determination and thus hospital financing in Germany.

Meanwhile, based on the Australian Refined DRGs (AR-DRG), more than 1,000 different DRGs allow the categorisation of medical cases in homogeneous groups of the same economic expenditure. The sum of all casemix values per year corresponds to the budget of a hospital granted by the German health insurance companies.

Therefore a clinic specialising in heart failure treatment might worry about losses by the decrease of the gained casemix points, as in-hospital days could be reduced by application of telemonitoring systems.However, two aspects ensure the that telemonitoring leads, apart from the improved medical patient`s care, also to an improvement in the economic situation of a hospital.

If a patient is hospitalised with the same DRG (due to repeated cardial decompensations) within a defined time interval in the same hospital, the hospital must connect both hospital stays to one case.

Thus, the high costs of the individual cases are no longer covered by the DRG-reimbursement system. Therefore reduction of hospital readmission in patients monitored via telemedical care reduces the danger of uneconomical unification of the individual heart failure cases.

The second aspect is the clear decrease of length-of-stay (LOS) in hospital due to telemedical care. Since the LOS is insignificant for the hospital's reimbursement [Figure 3], a shortened stay only leads to reduced costs for the individual case.

Thus, use of telemonitoring by reduction of readmissions and length of stay in heart failure patients could improve the net yield in patients, as reimbursement per case remains on casemix points and not on hospital days.

Implications

Following this analysis, telemedicine appears reasonable both on economic and medical grounds. Intelligent algorithms for vital param-

	Cohort with Standard Care	Cohort with Telemedic Care
Number	111	111
Mean days of inability to work	6.46	2.91
Number of referrals	63	37
Hospitalisations per patient	0.5676	0.3333
Hospitalised patients	46	28
Number of days in hospital	754	196
Mean number of days in hospital per case	11.97	5.3
In-hospital rehabilitations	28	3
Days of inhospital rehabilitation	660	65
Mean duration of inhospital rehabilitation	5.95	0.59
Costs of hospitalisation (DRG)	304,897 €	94,725 €
Costs of hospitalisation incl. rehabilitation	370,031 €	101,329 €
Costs of rehabilitation	65,134 €	6,604 €
Costs of rehabilitation per case	2,326 €	2,201 €
Costs of rehabilitation per patient	587 €	59 €
Mean total costs	5,873.50 €	2,739 €

Table 1: Economic analysis of hospitalisation-related costs after 180 days.

eters allow efficient monitoring of multiple patients.

More importantly, doctors can contact their patients earlier to prevent hospitalisations, or to individually adjust medication. After a given hospitalisation, and during titration of medication, a concept of technical de-escalation on a modular basis alongside with counselling measures appears possible to improve both patient awareness and CHF management. Finally, this implementation of telemedical care can work cost-efficiently.

AUTHOR
Christian Zugck, PD Dr. med.,
Medical Center of the University Heidelberg,
Department of Cardiology, Angiology
and Respiratory Medicine,
Heidelberg, Germany
Email: Christian.Zugck@med.uni-heidelberg.de

TELEPHONIC INTERPRETATION OPENING CULTURAL DOORS IN HEALTHCARE

By Michael Greenbaum

The United States has always been a melting pot of diverse cultures, a nation rich in ethnic heritage that stems from an immigrant population dating back to its beginnings. Nearly 11 percent of the U.S. population is foreign-born, and nearly 20 percent speak a language other than English at home.

Providing adequate language services to communicate with growing numbers of limited English proficient (LEP) patients continues to be a challenge in America's hospitals and healthcare facilities. While many hospitals use on-site interpreters, the number of different languages needed cannot be fulfilled by staff members only. One way that U.S. hospitals supplement the need for language interpretation is through telephonic services.

Telephonic interpretation is used by hospitals to quickly access dozens of languages 24-hours-a-day. The process involves a dual-handset phone that allows caregivers to communicate face-to-face with limited-English proficient patients via interpretation by a trained medical interpreter.

CyraCom is the country's leading healthcare-only provider of language services, including telephonic interpretation, document translation and interpreter testing and training.

The company serves more than 1,000 hospitals and healthcare facilities throughout the United States, and provided its service in 143 languages in 2006. It would be impossible to attempt to fulfill those language requirements with on-site interpreters around the clock.

The dual-handset phone operates using a standard telephone jack. A caregiver can access an interpreter in any language by simply picking up the left handset, pressing the "access" button, and then pressing the personal identification "account/PIN" button when prompted.

The preferred language may be accessed via voice prompt or by entering a code from the language list.

An interpreter in the desired language will come on the line in an average of less than 15 seconds. The caregiver may then choose to either give the right handset to the patient or use the speaker-phone function to begin the face-to-face interpretation session.

The service is a 24/7 rate for any language, at any time. Contracts may vary according to individual hospital needs that can include telephonic interpretation, document translation and/or testing and training of staff. The dual-handset CyraCom phones are owned by the company and the average cost per call is US$20.

The phones are typically used in the emergency room and other patient care units, such as labour and delivery. Some hospitals also use the phones in admissions and billing departments. Telephonic interpretation is also part of patient safety and satisfaction efforts in many U.S. hospitals.

Telephonic interpreters work closely with physicians, nurses and staff to not only help with understanding the language, but also to manage and understand cultural differences.

CyraCom telephonic interpreters practice cultural competency skills during training sessions that involve interacting with a variety of cultures. The interpreters learn how to negotiate the resolution of cultural issues that commonly arise while providing healthcare to LEP patients.

Each interpreter completes 120 hours of classroom instruction in medical interpretation to learn how to perform effective, over-the-phone interpretation. The innovative training techniques instruct the interpreters in how to facilitate a complete and accurate flow of communication between LEP patients and caregivers.

Furthermore, research has shown that LEP patients who face linguistic barriers when accessing healthcare services are less likely to seek treatment and preventative services. This can create poor health outcomes and longer hospital stays. Conversely, telephonic interpretation puts patients at ease and allows them to communicate and understand their medical condition while having a face-to-face conversation with a doctor or nurse. Trained telephonic interpreters are also instructed in how to use and explain medical terminology. In addition, the language services company can provide hospital staff training in how to access language services, as well as monitor and report on LEP patient situations.

CyraCom provides up to 25 hospital participants with on-site training in how to develop effective interpretation techniques.

The training includes the application of ethics, standards and protocols of

medical interpretation and techniques used to facilitate effective interaction between LEP patients and healthcare professionals. A "train-the-trainer" course is also available to provide healthcare organisations with a flexible, cost-effective approach to operating their own interpreter training programme.

An efficient hospital diversity programme that includes staff preparation, effective communication with staff and patients, and cultural competency training helps hospitals steer clear of ineffective treatment and provide the best patient care possible.

Some U.S. healthcare facilities have instituted cultural competency programmes. Others translate patient forms and informational material. Still others develop partnerships with community-based organisations to better understand their neighbours and to increase their cultural competency.

A critical response to increasing diversity is knowing the patient population and understanding its needs and background. Many U.S. hospitals are working to recruit more diverse employees, and hospital leaders are actively participating to ensure the success of diversity programmes.

The following are five main areas that hospitals should consider before deciding whether to work with a language services company:

1. **Need** – This may appear obvious, but many hospitals are still reluctant or blind to the accelerated pace of diversity in the country. A hospital must reflect the community it serves, so take steps now, both inside and outside your facility to recognise and communicate with LEP populations.

2. **Access** – Patients may feel more comfortable speaking their native tongue with someone in person, but how quickly can a trained interpreter who speaks Urdu be found at 3 a.m.? Telephonic interpretation provides the ability to access trained medical interpreters in multiple languages, 24-hours-a-day, seven-days-a-week.

3. **Training** – A clinician must be sure that LEP patients completely understand what is being communicated. He or she must also be clear about how the patient responds. Only an interpreter trained in medical terminology, ethics and compliance regulations can truly deliver the actual intent of what is being spoken.

4. **Reporting and Medical Record Number Integration** – Compliance issues increasingly require tracking and reporting of language services. The information is alsohelpful in gauging how and where the services are required. An effective language services company should have the

continued on page 44

THE NORWEGIAN HEALTH SYSTEM

By Bjørn Magne Eggen

Organisation of the Healthcare System

Under the Norwegian healthcare system, more than 85% of all expenditures are publicly covered. The 431 municipalities/communes, with population sizes ranging from 250-500,000 inhabitants, have been responsible for the primary health and care services since 1984. Almost every MD in general practice participates in the regular general practitioner scheme (termed "fastlege" in Norwegian). Since 2002, the state covers all the specialised health services through four regional health authorities. More than 90% of all hospital beds in Norway are in the 80 state-owned hospitals, organised as 31 health enterprises.

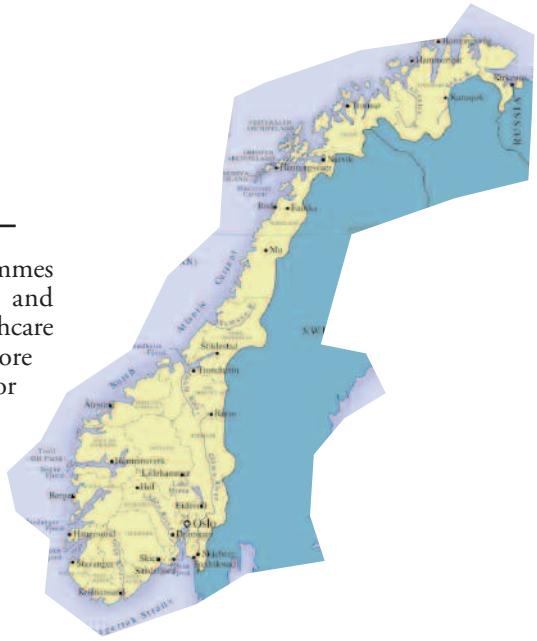
Communes finance home care and social services while GP services have a combined financing; from the communes (block granting, dependent upon number of enlisted patients), fee-per-service paid by the patients directly and by the national social benefit programme. The specialised health service has a combined financing; the psychiatric services are block (grant) financed, while somatic services are partially (60%) block financed and 40% fee-for-service financed.

In the Norwegian health and care services, patients have freedom to choose hospital nationwide, with total coverage from the state programme; the patients themselves pay only a small part of travel expenditure (up to 100 EUROS for each hospital stay) if they choose a distant hospital.

Educating hospital managers

There are several local programmes for management education and development within the healthcare system, in addition to the more standard university schemes for management teaching. Some of these programmes are driven by hospitals alone, or in cooperation with colleges/ universities. In addition, in 2003 the regional health authorities initiated a common, national training programme for hospital managers. More than 300 hospital managers have completed this programme, which consists of an intensive 13 week training period led by experienced leaders and focuses on leadership attitudes as well as tools relevant to each participant's local position.

AUTHOR:
Bjørn Magne Eggen,
Director of the Clinic of Medicine,
Akershus University Hospital,
(former Division-Director at The Ministry of Health and Care Services)
email:
bjorn.magne.eggen@ahus.no



FACTS & FIGURES	
Population:	*4,7 millions inhabitants*
Area:	*323,700 square kilometres (North – South distance: 2,500 km)*
Language:	*Norwegian (with two official forms), and Lappish*
Capital:	*Oslo*
Total GDP:	*NOK 2,170,000,000,000 (appr. EUR 271,000,000,000)*
GDP per capita:	*NOK 461,665 (appr. EUR 57,700)*
Healthcare spending:	*NOK 150,000,000,000 in total; NOK 31,800 (EUR 4,000) per capita; 9.7% of total GDP (2005).*
Healthcare professionals:	*Total 212,000; 15,135 medical doctors (25% GP's).*
Amount of professionals in primary care services:	*55%*
Amount of healthcare spending in primary health services:	*36.1 % (NB: Care and social services are not included)*
Average life expectancies:	*81.9 years (women): 76.9 years (men).*

HOSPITAL SERVICES IN NORWAY

By Dr. Dag Bratlid

Norwegian hospitals have traditionally been owned and operated by the 19 different county councils. Most of the funding was provided by the national government in the form of block grants based on the size of the population as well as demographic and social characteristics. Since 1997, the block funding has been gradually replaced by a matching grant depending on the number of treatments (DRG-based), from 30% of gross budget in 1997, to 60% in 2001, and in 2006 reduced to 40%. Outpatient activities are reimbursed based on the number of patients and type of consultations. Furthermore, because of the problems within the Norwegian National Health Service (NHS), long waiting lists, and huge budget deficits, a reform was passed where the central government took over the ownership of all hospitals which were organised into five regional hospital enterprises, active from January 2002. The regions are: Health Region East in the southeast part of the country; Health Region South in the south part of the country; Health Region West on the southwest coast; Health Region Middle Norway in the middle of the country; and Health Region North in the north.

All health regions include a university hospital equipped and staffed to take care of most patients with diagnostic and therapeutic needs above what the smaller hospitals in the region can deliver. Some highly specialised services with a small patient volume are, however, organised in national monopolies or duopolies at selected university hospitals (see below).

To some extent, hospital reform has not met expectations. This has particularly been evident in the area in and around the capital of Oslo with several hospitals and almost one third of the national population, where Health Region East and Health Region South have not succeeded in co-operation in patient treatment. The Minister of Health has therefore, effective from July 1st 2007, merged these two health regions into one regional enterprise covering almost two thirds of the population, markedly greater and different from the remaining other three regions. This move has been described by many observers as a continuation of a process where hospitals finally will be organised as one national enterprise under government administration and leadership in the near future.

Hospital size

Somatic hospitals in Norway are rather small. Only four university hospitals have more than 800 beds.

No hospital can be found with a size between 601 and 800 beds. Usually at least one hospital in each county and thus several in each health region have between 201 and 600 beds and can deliver most services within general and orthopaedic surgery, emergency medicine and critical care, pae-

diatrics including neonatology, obstetrics and gynaecology, internal medicine and oncology, neurology, otorhinolaryngology and ophthalmology. The majority of the hospitals are however small, with less than 100 beds, and with services only in general internal medicine, general and orthopaedic surgery as well as obstetrics and gynaecology.

As a part of the mentioned reform, several smaller hospitals within a health region were merged under one administration with the intention of increasing productivity, reducing costs and increasing quality by collaboration through better organisation of services between the different hospitals. So far, this has resulted in only minor practical changes, partly because of political and local opposition. Thus, until now the present government has guaranteed that present services will remain at all (small) hospitals and no hospital will be closed, awaiting the evaluation of a committee on the future of smaller local hospitals.

Hospital resources and activity in somatic medicine

As a consequence of regional differences between resources and productivity, some regions, particularly Health Region West and Health Region Middle Norway, seem to get less funding compared to other regions. This has stimulated a debate on principles for government funding of the health regions.

As can be seen from the table, the increase in activity from 2005 to 2006 almost parallels the increase in personnel. There is however, a shift to more day-care treatment and outpatient consultations and less overnight admissions.

Private hospitals

Private healthcare has never had a large volume in Norway. This may partly be related to the fact that private health insurance also is rare. Private hospitals are few and usually specialise in simple surgical procedures within general and orthopaedic surgery, otorhinolaryngology, ophthalmology and cosmetic surgery.

In the 1990's as a result of an increased focus on the need for competition and private enterprises also in healthcare, several small private hospitals were started. The NHS also contracted out specific treatments to several of these hospitals. These private hospitals mainly relied upon the interest of doctors employed within the NHS to work in these hospitals in their off-hours from their regular jobs, while most nurses were full-time employees.

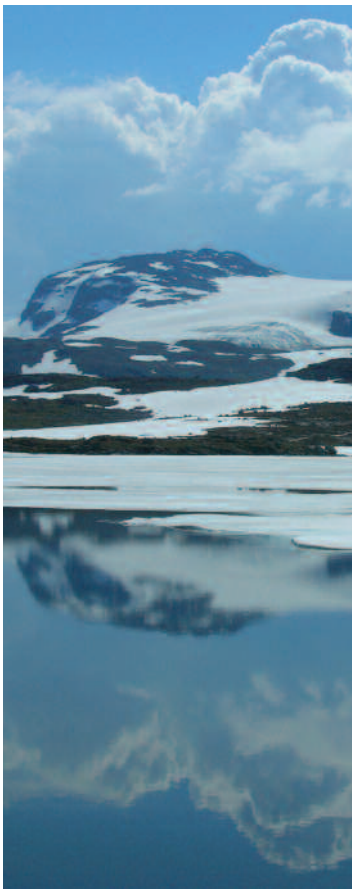
This has now changed. Firstly, the present government has placed restrictions on the possibility for the hospitals within the NHS to outsource patients and treatments to private institutions.

Secondly, hospital managers have restricted and actually banned doctors employed in their institutions from working part-time in private institutions which can be considered to compete within the same market. Private hospitals in Norway are therefore increasingly more dependent on patients who are willing to pay for treatment themselves, and mostly for treatments not covered by the NHS, such as cosmetic surgery.

Centralisation of highly specialised medicine

The presence of many small hospitals in Norway has raised concerns regarding the ability of many hospitals to maintain quality and efficiency of procedures regarded as the most difficult, costly and critical. A monopoly system was therefore established in 1990, defining a number of highly-specialised and costly medical services in which there was both a duty for county hospitals to refer patients to, as well as an obligation for the designated university hospital to admit patients in these defined services.
By means of control of purchasing of expensive equipment as well as establishment of special laboratory services and personnel at selected university hospitals, the government ascertained that treatment of patients with rare and complicated diseases was not split between several hospitals, when each of those would not reach a sufficient patient volume to secure adequate quality of treatment.

By 2001, there were 31 such monopoly functions, 24 of which were located at the two university hospitals in Health Region East and Health Region South in the capital of Oslo, four were located at the university hospital of Health Region West in Bergen, and three were located at the university hospital of Health Region



Middle Norway in Trondheim. Seven duopolies were split between the same hospitals. None of the services were located in Northern Norway. Monopolies admitted from 0 to 431 new patients every year, duopolies from 0 to 200 new patients at each hospital. Altogether these services include approximately 2,700 new patients every year.

Data show however, that fulfilling the original objects of quality and efficiency has been achieved at the expense of a loss of equal access for all patients. Despite the fact that the performance of these services has been monitored, highly significant differences in access to the services for patients from different parts of the country has been disclosed in a recent study (2). The general tendency is that people living in the north and in "district Norway" have a substantially reduced chance of being admitted to these highly specialised services.

Thus, the regionalised organisation of hospital medicine seems to be adequate for maintaining the balance between quality and equality for the majority of patients and health services in general, including the peripheral parts of the country. In a regionalised system, quality may not always be perfect, but the loss in this aspect is for most patients probably more than compensated by a gain in accessibility.

Psychiatric hospital medicine

During the last few years, there has been an increased focus on funding of psychiatry versus funding of somatic medicine within the health regions. This is partly because psychiatry has fallen behind the development in somatic medicine and partly due to the recognition of mental illness as an important and increasing health problem in the population.

While community healthcare is responsible for services for everyday mental problems and follow-up of some patients under stable treatment, treatment of defined psychiatric disorders and hospitalisation of patients with mental illnesses is the responsibility of the hospitals in the different health regions. Some of these patients are treated not only in the regional hospitals, but also in smaller so-called district psychiatric centres. These centres are mainly for outpatient visits but also have beds for sicker patients.

Working conditions of healthcare professionals

Also in Norway, during the last few years there has been a focus on working conditions for healthcare professionals, particularly nurses and doctors. Nurses work a three-shift schedule with a 35.5-hour work week in a full-time position. Most full-time positions usually include day, evening and night shifts. However, in order to fill all shifts, many nurses have to work in reduced positions, and a complete schedule usually includes shifts on every third weekend. The

Kristin Dvergsdal, Ørjan Bergman PricewaterhouseCoopers, Norway

Benefits of Utilising Optimisation and Simulation in Healthcare

It is well-known that operational complexity often goes with a decrease in operational effectiveness. This is particularly conspicuous in healthcare - characterized by a complex and varying service offer often indicating suboptimal solutions. In order to counter the loss of effectiveness, policy changes should be implemented by the management. However, as new modus operandi often have undesirable and unforeseen consequences, new methodologies for quantifying, controlling and predicting these consequences are needed.

In this paper we briefly describe how policy development and testing using optimization and simulation can lead to a decrease in implementation risk, as well as to a better understanding of important operational aspects. In healthcare, utilization of strong tools and methodologies when performing changes and implementing improvement strategies is extremely important, as solutions incorrectly addressed might have fatal consequences.

Implementing a change is an important part of any large-scale operation striving for cost effectiveness, and especially when it concerns higher quality of patient care. Any change should always be dictated by the current state, as well as the objectives of an organization. Such objectives might seem easy to formulate, but surprisingly difficult to achieve in a cost effective manner.

Some obvious and common examples of healthcare goals are:

- Significant decrease in patient waiting time
- Optimal scheduling of operations, patients, nurses and physicians without overspending
- Determining the number of physicians who should be on call at any moment in order to keep up with patient requirements.

These objectives are examples of patient flow, scheduling and optimal capacity problems respectively; general problems that occur frequently and repeatedly in healthcare.

Getting from the current "as is" situation to the desired "to be" scenario, requires for management to adjust to a number of operational parameters - meaning that management has many alternatives towards achieving an objective. Indeed, any decrease in waiting-time can be realised by assigning enough resources (such as nurse working hours, doctors on call, etc), but each resource is usually associated with a significant cost. The objective is therefore not simply to implement the required changes, but to do so **while minimizing** cost. More precisely, we wish to minimize the cost of a change by adjusting operational parameters to operational objectives.

When the cost of each parameter is measurable, it is possible to formulate a **model** of the problem. Moreover, any changes in resource allocation may be reflected by the cost of change in the model. Such financial models are usually examined manually by economists, in order to find a **solution**; an "adequate selection" is one where parameters satisfy the constraints.

However, whoever has ever tried to solve a large scheduling problem knows that finding a feasible solution is difficult. Additionally, finding a solution that minimizes costs seems almost impossible. Hospital decision makers at various levels face such challenges on an daily basis; finding a adequacy between patients' demands and therapeutic services while minimizing costs. Human intuition often fails when faced with problems where the relationship between operational parameters and outcomes is crucial. Thus, more formal methods are required.

Optimization is an area of applied mathematics dealing with solutions to constrained minimization problems. These techniques allow a number of large and difficult minimization problems, e.g. resource assignment, patient flow, scheduling, capacity planning and transportation to be solved automatically using a computer. As the optimality of the calculated solution is guaranteed, the solution will have a higher degree of credibility and a significantly lower associated risk.

A policy needs to be developed as theoretical solution before being actually implemented. Formulating such poli-

cies is a managerial responsibility that should always rely on be proven testing and planning. It is important for the policy to resist to changes that occur during the implementation phase in any dynamic environment. As details evolve from planning to implementation, it is vital for the policy to be strong enough not to deviate significantly from the objective. Also, the policy should not cause any unforeseen consequences.

A well-proven methodology for experimenting with and testing such policies is called **simulation**. When the details of an environment are known, a virtual model of the involved entities can be created. This model should capture all relevant details and interactions of the environment in question. Through experimentation with this "virtual world", details of the causes and effects of any policy can be reviewed and measured before actual implementation. Such policies may be organisational changes within wards or improvements in patient flow – according to the number of variables affecting the change as a whole.

In a simulation model several policies may be tested to determine the single most appropriate one towards achieving an objective (i.e. optimal bed capacity, improved patient flow within a hospital). Since each parameter in the model is measurable, it is easy to validate its correctness as the policy is implemented. It means that empiricism, such as process maps representing ward activity or patient data representing patient flow patterns, is used as benchmark when an improvement policy is introduced in a hospital.

The net result for an organization implementing a change is predictability in terms of results, implying a decrease in implementation risk. This predictability stems from the knowledge that a large number of scenarios and policies have been considered before getting to the final one with full knowledge of its consequences, disadvantages as well as benefits. As simulation explores and highlights properties of the underlying environment, a significant learning and understanding benefit for management is also associated with modelling.

starting salary for nurses is approximately €37,500. Many nurses specialise in surgery, anaesthesiology and critical care, paediatrics and others. Such specialisations are also better paid. Nursing organisations have worked hard to reduce the number of nurses with reduced positions as well to reduce the number of weekend shifts within the schedule.

Unlike nurses, doctors are principally considered day-time workers but with the obligation to cover a 24-hour service when needed. This means that doctors in most hospitals departments take part in call systems. Some of the extended work hours are also compensated by days and weeks free from work, for instance every eighth week in an eight-week schedule.

In the last few years there has been an increased focus on the fact that many doctors in call systems often work continuously for up to nineteen hours, considered a possible hazard both for the doctor and the patients. The Norwegian Medical Society has, however, opposed the idea of a regular shift schedule (like the nurses) as an alternative, partly because this would reduce continuity in patient care.

Hospital management system

Hospitals in Norway are theoretically managed by the principle of one leader on all levels. All leaders are appointed, either by the board of the regional enterprise, the board of each hospital, or by the hospital director. Every position as a leader, particularly on a higher level such as head of department and head of clinic is in principle also neutral to professional background, although a reasonable knowledge of healthcare and medical issues is needed. This implies that in principle any healthcare professional could be a leader on these levels. So far however, most department heads and clinic directors are still medical doctors with some additional administrative training. Also, in some instances nurses and medical laboratory technologists who have been appointed to such positions have been met by strong opposition, particularly by the Norwegian Medical Association, who strongly argue that such positions should be filled by doctors only. In contrast, hospital directors are more often recruited from non-medical professions.

References available at english@hospital.be

AUTHOR:
Dag Bratlid, MD, PhD, MHA,
Department of Pediatrics,
S. Olavs University Hospital,
Trondheim, Norway
Email: dag.bratlid@ntnu.no

Vestfold Hospital in Norway:

One of 1st breast care units in the world to go all digital

It was a bold decision for Vestfold Hospital in Norway to establish an all-digital breast care unit in 2002. Digital breast imaging was in its infancy, and few breast centers in Scandinavia, indeed few in the world, were completely digital.

The center had originally planned to purchase one digital mammography system and a computed radiography system. However, a financial analysis found the site could more than break even with two digital mammography systems and a prone breast biopsy system. One digital mammography unit would be dedicated to breast screening; the second would be reserved for diagnostic cases.

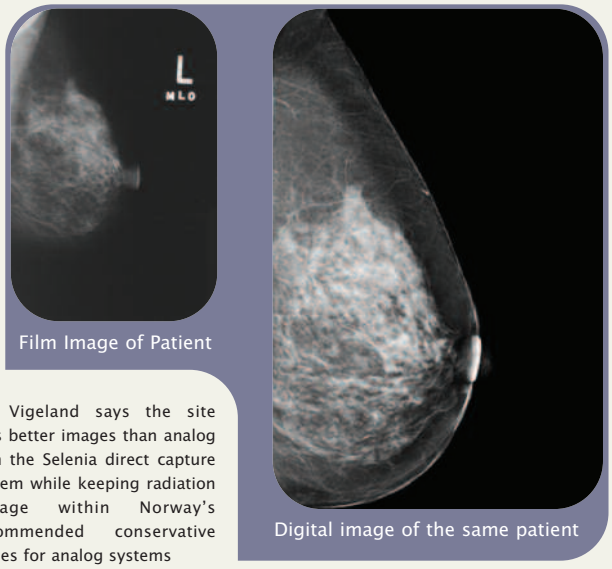
The addition of a prone biopsy table would ensure that optimal patient care could be achieved. Criteria and motivations were diverse. Hospital radiologists wanted to acquire the best image quality and give optimal patient comfort.

The hospital administrators wanted a system that would evolve as the Center's patient population grew while putting up with very heavy usage for the Norwegian Breast Cancer Screening Program. After a thorough review of the available technologies, Vestfold chose the Hologic Selenia digital mammography system. The decision to go with Hologic technology was based on the quality of their selenium detector images and the size of their detector (the system's field of view is one of the largest available).

"We believe strongly in the [Hologic Selenia] detector," said Dr. Einar Vigeland, the leadingconsultant radiologist at the breast care unit in Vestfold. *"We have a strong belief that we have chosen the right system and that this is the solution for the future."*

Also important was the integration of mammography into the radiology department's existing PACS. At Vestfold mammograms are both archived and presented on soft copy workstations using the PACS. They are made available electronically throughout the radiology department. Dr. Vigeland is particularly impressed with the Selenia system's ability to visualize microcalcifications. *"For microcalcifications, digital is clearly superior to analog."* The center receives analog images from many referrers, enabling an easy comparison with digitally captured pictures. *"We cannot see anything on film better than we can with digital,"* he said.

In August 2007, European Radiology published the results of a study by Dr. Vigeland and his colleagues. The study looked at cancer detection and recall rates for 18,239 women screened with the Selenia systems at Vestfold Hospital compared to the results of 324,763 women screened with film in other hospitals involved with the Norwegian breast screening program.



Film Image of Patient

Dr. Vigeland says the site gets better images than analog with the Selenia direct capture system while keeping radiation dosage within Norway's recommended conservative values for analog systems

Digital image of the same patient

While prior studies have compared the performance of digital mammography to screen-film in high volume screening, until this study, no researchers had looked at the performance of this specific digital mammography technology exclusively. The detector characteristics and way the various digital mammography systems operate is considerably different. The pixel size of the system studied, the Hologic Selenia system, is smaller, the system uses direct capture (selenium) technology, and the image-processing algorithms are unique, resulting in a sharp, high contrast image.

The researchers found that the detection rate for ductal carcinoma in situ (DCIS) and the positive predictive value for cancer (PPV) were statistically significantly higher and the technical recall rate was statistically lower for Selenia over film.

Image quality and dose aside, image archival and presentation are less labor intensive with the digital systems. The one or two medical professionals who used to hang images on light boxes can now concentrate their efforts on other crucial duties. In fact, the entire system runs more smoothly when the light box shortage inherent to analog systems in busy departments is circumvented.

"Overall," Dr. Vigeland said, *"the digital systems enable radiologists to make a more flexible use of their time."*

NORWEGIAN HOSPITAL AND HEALTH SERVICE ASSOCIATION (NSH)

How does the NSH contribute to the health service of today and tomorrow?

By Erik K. Normann and May Britt Buhaug

The NSH was established in 1937. There was an urgent need for an association which could, on a professionally and politically neutral basis, bring to attention the wide spectrum of problems the Norwegian health service was facing, and influence the authorities to take control and responsibility.

The association is now for the authorities the most important external resource securing a high level of quality. Today the tasks are, of course, of a different kind as the situation and problems within the health service have become far more complex and varied. Our association is more strongly needed than ever. NHS's visions are:

- to play an active part in securing the proper development and use of resources in the health service.
- to encourage dialogue and mutual trust between personnel and clients in the health sector.

NSH's goals are described in the regulations as follows:

- to bring up and illuminate current and essential approaches to problems in Norwegian healthcare.
- to contribute to an increased competence level and to an exchange of experience in healthcare.
- to develop interdisciplinary co-operation between different health personnel groups, and a fruitful co-operation between institutions and administration levels.
- to aim for the development of a Norwegian health service which has a respectful approach to human, medical and caring needs, and to encourage equality and respect for the individual human being.

NSH aims for the future:

- to be engaged in the debate and dialogue about the health service developments.
- to be a meeting place for constructive dialogue.
- to play a major part in the forthcoming development of the Norwegian health service.
- NSH's interdisciplinary representation gives us great opportunities to achieve better solutions and to be heard in the debate about the development focused on clients' and patients' interests in the Norwegian health service.

The NSH has about 240 members, this is both private persons, hospitals, organisations, institutes and universities. All Norwegian hospitals are members. The NSH has a board consisting of nine persons, which represent various fields in the health service and they are geographically spread. The board is managed by Erik K Normann, MD, CEO at Akerhus University Hospital.

The secretariat is located centrally in Oslo, consisting of five persons and is managed by Secretary General May Britt Buhaug.

The NSH is engaged in keeping its neutral role in Norwegian healthcare and therefore receives no public support. Nevertheless we are still engaged in collaboration with the public authorities and others that can demonstrate our aim to work together across the professions in healthcare.

One of NSH's main engagements is to organise a meeting place across the professions in Norwegian healthcare. Our aim is, in a neutral way, to bring up and illuminate current and essential approaches to problems in Norwegian healthcare and to encourage dialogue between personnel and clients in the health sector. The NSH is the only health organisation in Norway that goes across professions and departments.

NSH joined EAHM in 2006 and a Norwegian delegation attended the Dublin congress in August 2006. We hope, through EAHM, to get information and inspiration about trends in European healthcare.

AUTHORS:
Erik K. Normann and May Britt Buhaug,
Norwegian Hospital and Health Service Association
Email: maybritt.buhaug@nsh.no

continued from page 35

ability to assist in the electronic medical recordkeeping process by integrating the medical record number into a language usage report.

5. **Cost** – Once the extent of the need for language services is determined, it is best to weigh and compare how related costs should be budgeted. Some U.S. hospitals find a combination of live and telephonic interpretation works best, others find it more cost-effective to use one or the other.

European hospitals and healthcare facilities face increasing diversity—more languages spoken by immigrants who are settling in a larger number of locations. Telephonic interpretation offers a solution for dealing with the rising tide, while offering cost-effective quality care.

AUTHOR:
Michael Greenbaum
CEO, CyraCom,
Email: mgreenbaum@cyracom.com
or visit www.cyracom.com.

One destination. Many paths.

We'll take you there

Your radiology department and your path to digital is unique. Yet, your goal to provide the highest level of care is shared worldwide. We know. Found in 1 of every 2 hospitals, Agfa HealthCare works alongside radiologists every day. Our systematic steps to integrated digital radiology allow you to advance at your own pace, without jeopardizing current systems or investments. This allows you to choose the solutions you want: advanced imaging systems, integrated RIS/PACS/Reporting, sophisticated data management, or integrated digital workflows for radiology, mammography, cardiology and the healthcare enterprise - in particular for electronic health records (EPR), clinical information systems and process management systems. So as you consider your chosen path, let our proven experience support your next step, and every step after that.
www.agfa.com/healthcare

Learn more about our proven solutions. Contact your Agfa HealthCare Territory Manager or Petter Oestbye, Nordic Product Manager at petter.oestbye@ agfa.com

AGFA HealthCare

Evaluation de la qualité des hôpitaux en Europe - vers un système d'accréditation européen?

A l'occasion de l'assemblée générale annuelle de l'AEDH qui se tiendra le 16 novembre dans le cadre de Medica à Düsseldorf, l'AEDH organise un séminaire autour du thème de l'évaluation de la qualité, et plus précisément de l'accréditation, une procédure externe d'évaluation en tant qu'instrument potentiel de mesure de la qualité. Cette rencontre a été préparée par le comité scientifique de notre association; elle devrait nous offrir un aperçu des systèmes existants d'évaluation de la qualité dans différents pays européens et des expériences qui y ont été vécues.

Ceci est important pour nous. Nous constatons en effet que certains systèmes ont été plusieurs fois retouchés, d'autres abandonnés parce que déficients ou trop compliqués. A partir de ce bilan, nous espérons concevoir un modèle européen d'accréditation, dont certaines de nos associations nationales pourraient recommander l'adoption. Puisque, selon la structure de l'Union européenne, les compétences en matière d'organisation des soins de santé reviennent aux seuls états-membres, il n'existe que cette possibilité pour agir de façon transnationale sur cette question. L'AEDH en appelle cependant à l'UE afin qu'elle soutienne activement cette évolution, en particulier par rapport aux propositions de la Commission européenne dans ce domaine, qui devraient êre connues sous peu.

Les conclusions d'un workshop organisé par la Commission européenne sur l'avancement de l'évolution du marché unique ont déjà clairement énoncé que l'évaluation de la qualité, ainsi que les comparaisons et les améliorations qui en découlent, doivent être considérées comme très importantes. Désormais, il s'agit «d'arriver en priorité à une définition, une mesure et une évaluation de la qualité ».

L'initiative lancée par l'AEDH comporte de nombreux avantages. Les hôpitaux subissent des transformations dans toute l'Europe. Une plus grande exigence de qualité de la part des patients, des restrictions légales, de plus grands besoins financiers émis par les hôpitaux alors que les moyens publics stagnent, voire régressent, la modification des accords professionnels pour de nombreux collaborateurs de soins de santé, et une concurrence accrue entre fournisseurs de soins de santé ne sont que quelques exemples de ces changements qui nous défient. Les expériences et la comparaison des indicateurs de performance entre hôpitaux se présentent comme un moyen d'éviter de possibles échecs thérapeutiques par la recherche de la cause des mauvaises décisions. Même si un certain nombre de ces contre-performances ne sont pas forcément imputables aux groupes professionnels concernés, mais sont guidées par des directives propres à chaque pays. Ainsi, le Volkskrant néerlandais publie les résultats d'une étude effectuée par un bureau d'études renommé, selon lequel les fusions hospitalières poursuivies par les Pays-Bas seraient contre-productives. Les économies financières et l'efficacité de planification attendues de ces grandes entités commerciales ne se seraient pas produites, au contraire, une plus forte bureaucratie et un plus grand nombre de cadres dirigeants seraient apparus. Ceci aurait agrandi le fossé entre patient et médecin, et provoqué en conséquence une perte claire de qualité. Cet exemple démontre qu'il vaut la peine de tirer les leçons d'hypothèses différentes, surtout nationales.

Willy Heuschen

Eu égard à l'importance de la question, nous nous réjouissons d'accueillir nombre de nos collègues à Düsseldorf et de façonner ensemble ce fondement essentiel de l'amélioration de la qualité de nos services hospitaliers au niveau européen.

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.

L'AEDH VOUS INVITE A SON SÉMINAIRE, LE 16 NOVEMBRE 2007 A DÜSSELDORF:

"Instruments d'évaluation de la qualité dans les hôpitaux – Vers un système européen d'accréditation librement consenti? "

Le séminaire se tiendra conjointement avec l'Assemblée générale 2007 de l'AEDH et les Journées hospitalières allemandes, qui coïncident avec la plus grande exposition commerciale médicale du monde, MEDICA.
Le séminaire est GRATUIT et sera traduit en anglais et en allemand.

Pour vous inscrire: veuillez envoyer un email à josvanlanduyt@eahm.eu.org
ou appeler le +32 2 733 69 01 pour plus d'informations.
L'inscription est obligatoire, les places disponibles sont limitées.

Programme préliminaire

Première partie

10.00 – 10:05 Accueil
Heinz Kölking, *Vice-Président de l'AEDH*

10:05 – 10:20 Introduction
Asger Hansen, *Ancien Président de l'AEDH, Président du sous-comité scientifique*

Vision européenne
Modérateur: Asger Hansen

10:20 – 10:50
Outils d'évaluation de la qualité en Europe
Dr. Charles Shaw, *Consultant, Royaume-Uni*

10:50 – 11:20
Projet Marquis
Prof. Rosa Sunol, *Fondation Avedis Donabedian, Espagne*

11:20 – 11:50
Perspectives de la Commission européenne en matière de services de santé et de qualité des soins
Dr. Andrzej Rys, *Directeur de la Santé publique, Commission européenne*

11:20 – 11:50
A la recherche de soins de grande qualité
Prof. Vleugels, *Directeur du Centre de Services de Santé et de Recherche infirmière, Université catholique de Leuven, Belgique*

Lunch

Deuxième partie

13:30 – 14:00 Prix Golden Helix 2007 – Présentation des finalistes et annonce du projet gagnant

Expériences des directeurs d'hôpitaux à travers l'Europe
Modérateur: Asger Hansen

14:00 – 14:30
Expériences des Pays-Bas
A confirmer

14:30 – 15:00
Expériences du Danemark
Dorte Bagger, *Coordinateur d'accréditation, région de Hovedstaden, Danemark*

15:00 – 15:30
Expériences allemande
Dietmar Nichterlein, *Directeur, Klinikum Chemnitz, Allemagne*

15:30 – 16:30 Table ronde
«L'avenir de l'accréditation en Europe»
Modérateur: Manel Peiro, *Universitat Ramon Llull – ESADE, Espagne*

Conclusion
Asger Hansen, *Président du sous-comité scientifique*

IT et technologie médicale se rapprochent page 12

Par Joachim Hiller et Timo Baumann

La technologie de l'information et la technologie biomédicale sont soumises à des exigences constantes d'adaptation. Les composants IT classiques deviennent automatiquement des composants medico-techniques quand ils sont utilisés dans le secteur des soins de santé et particulièrement dans l'environnement immédiat du patient. La Kinik am Eichert de Göppingen innove: des secteurs et des départements spécialisés et d'ordinaire séparés travaillent sur des projets dans un contexte d'interaction dynamique et selon des paramètres clairement définis. Le plus grand défi est donc de créer une harmonie au niveau humain qui permet d'installer une équipe interdisciplinaire.

Imagerie moléculaire, une révolution diagnostique page 14

Par By Shahram Hejazi

L'imagerie moléculaire est une technologie qui détecte les maladies plus tôt et plus vite. Alors qu'il faut des mois ou des années pour visualiser une tumeur, par exemple, aux rayons X, l'imagerie moléculaire optique permet d'observer les fonctions cellulaires et de détecter une anomalie de façon plus précoce, en quelques jours ou quelques semaines, ce qui la rend plus simple à traiter.

Elle offre aux spécialistes la possibilité de voir l'activité effective des cellules et également de déterminer si une tumeur est bénigne ou maligne, ce qui est impossible avec les technologies conventionnelles d'imagerie.

L'imagerie moléculaire va plus que probablement atteindre le marché hospitalier aux Etats-Unis comme en Europe dans les cinq prochaines années. Son impact sur le management considérable. Les directeurs d'hôpitaux feraient bien de se familiariser avec cette nouvelle technologie afin d'entrer de plain-pied dans l'imagerie du 21ème siècle.

L'ingénieur biomédical français page 16

Par Martine Decouvelaere

Dans un hôpital ou une clinique française, le rôle du département d'ingénierie biomédicale est de gérer l'équipement médical, depuis la planification jusqu'à la mise au rebut, de conseiller ou de contribuer à une restructuration de l'hôpital, d'acheter les équipements médicaux, et d'en gérer la maintenance.

Le département, qui fait souvent partie de l'unité technique, logistique ou achats, est responsable devant la direction de l'hôpital.

L'ingénierie clinique assume et continuera à assumer une position stratégique dans l'établissement de soins. Les connaissances et compétences de l'ingénieur biomédical lui permettront de soutenir les gestionnaires hospitaliers dans des dossiers généraux ou stratégiques tels que:

- les ressources techniques nécessaires, et les plus efficaces pour assurer les performances médicales que les hôpitaux doivent atteindre
- l'équipement le plus approprié en termes d'utilisation et de performances au coût le plus bas, en fonction des besoins médicaux
- l'ampleur, l'organisation adéquate et le coût du plan de maintenance à même de garantir la sécurité et la disponibilité opérationnelle nécessaire pour l'équipement médical de l'établissement.

Responsabilités dans le secteur financièrement lourd des salles d'opération page 20

Par Holger Otto

Les salles d'opération ont été identifiées comme une zone financièrement lourde et où un changement structurel est indispensable, dû au fait que du personnel hautement qualifié provenant de différentes disciplines coopère là dans un espace confiné et utilise des ressources matérielles considérables.

De bons chirurgiens, anesthésistes et infirmières sont essentiels à la qualité de l'infrastructure mais un nouveau type de professionnel, à savoir les coordinateurs et gestionnaires de quartier opératoire, sont également requis pour assumer la responsabilité et la garantie de procédures opératoires organisées de façon efficace.

Le coordinateur opératoire, un clinicien ou une infirmière qualifiée, planifie et dirige les activités quotidiennes des salles d'opération. Il/elle est responsable du fonctionnement fluide de l'unité et de l'intégration des cas d'urgence.

Le gestionnaire opératoire, la plupart du temps un médecin ou un membre de la direction des soins, doit rendre des comptes au conseil d'administration et est responsable du développement d'une stratégie à long terme de l'unité chirurgicale.

Créer un modèle collégial pour améliorer le flux de patients page 24

Par Christy Dempsey

Le Centre de santé régional St John est un hôpital de proximité de 866 lits situé au sud-ouest du Missouri aux Etats-Unis. Il dispose de 26 salles d'opération dans l'hôpital principal et de 8 salles de chirurgie ambulatoire pour traiter les 31.000 cas annuels.

L'une des premières initiatives, et celle qui a eu un des impacts les plus importants, a débuté en octobre 2002, lorsque des données et des théories furent présentées qui soutenaient la séparation des cas programmés et non programmés. En classant les cas en populations homogènes, la variabilité artificielle a été réduite et l'efficacité améliorée.

La salle complémentaire a été mise en fonction en novembre 2002. Aucune intervention ne peut être programmée dans cette salle avant 6 heures du matin le jour de l'opération.

Le succès de cette salle supplémentaire a donné un coup de fouet à la confiance et à la collaboration entre l'hôpital et les médecins, permettant ainsi des améliorations plus substantielles au niveau de l'hôpital qui, à leur tour, ont eu des implications positives considérables sur le volume de cas et les revenus.

Chirurgie ambulatoire en France: provoquer le changement page 26

Par Ayden Tajahmady et Maxime Cauterman

Développer la chirurgie ambulatoire est une option stratégique qui requiert des hôpitaux des talents rares d'entrepreneurs. De plus, les signaux émis par les autorités et certains professionnels sur la chirurgie ambulatoire sont souvent brouillés et contradictoires.

Nous avons constaté que les unités de chirurgie ambulatoire qui marchent bien se reposent sur deux acteurs principaux: le gestionnaire médical et l'infirmière en chef de l'unité. Le gestionnaire médical est le véritable entrepreneur, il lui incombe de repérer de nouveaux cas et de convaincre ses collègues de travailler en collaboration avec l'unité.

L'infirmière en chef peut se concevoir comme une gestionnaire de production, responsable du développement de l'activité et du contrôle du processus de production.

Différents types d'organisation ont été observés: certains chirurgiens commencent leur programme de la journée par les cas ambulatoires, d'autres assignent des périodes de temps aux interventions ambulatoires, l'étape ultime étant de leur consacrer entièrement une salle d'opération.

Utilisation du télémonitoring dans les insuffisances cardiaques chroniques page 29

Par Christian Zugck, Janis Radeleff et Lutz Frankenstein

Les stratégies de gestion de la maladie ne devraient pas se concentrer uniquement sur la médication mais inclure les moyens de réagir aux changements d'état de santé et de coordonner l'adaptation de chaque patient à sa pathologie et à son environnement.

La télémédecine pourrait être un outil stratégique dans l'intégration de ces conditions préalables, afin de faciliter la communication et de réduire les taux d'hospitalisation. De plus, une méta-analyse récente a conclu que le télémonitoring pourrait être efficace pour réduire le séjour hospitalier et les hospitalisations, ce qui aurait un effet considérable sur les capacités hospitalières nécessaires.

Une analyse économique indépendante a démontré une diminution significative des coûts liés aux insuffisances cardiaques chroniques (environ 3000 euros par patient par an) chez les patients surveillés via les soins télémédicaux, principalement grâce à une réduction de séjours hospitaliers.

L'interprétation téléphonique ouvre une dimension culturelle aux soins de santé page 34

Par Michael Greenbaum

Les Etats-Unis ont toujours été un melting pot de cultures diverses, qui en ont fait une nation riche d'héritages ethniques apportés depuis ses débuts par une population immigrée. Presque 11% de la population américaine est étrangère et environ 20% parlent chez eux une langue autre que l'anglais.

Communiquer dans la langue appropriée avec un nombre croissant de patients ayant une connaissance limitée de l'anglais (LEP pour limited English proficient) demeure un défi pour les hôpitaux et établissements de soins américains.

Alors que de nombreux hôpitaux utilisent des interprètes sur place, ils se heurtent à un nombre de

langues tel qu'ils ne peuvent plus compter seulement sur leur personnel. Ils recourent donc à des services téléphoniques d'interprétation.

L'article décrit en détail le fonctionnement du principal fournisseur américain de services d'interprétation destinés exclusivement aux soins de santé, et utilisés par les hôpitaux 24 heures sur 24 pour des dizaines de langues.

Les hôpitaux et établissements de soins européens font face à une diversité croissante de langues parlées par les étrangers qui s'installent partout sur le continent. L'interprétation téléphonique offre une solution qui permet de combiner ces problèmes de langue à la prestation de soins rentables et de qualité.

Le système de santé norvégien page 36

Par Bjorn Magne Eggen

La Norvège ne compte que 4.7 millions d'habitants mais son territoire s'étend sur 323.700 km2 avec une distance nord-sud de 2.500 km. Les municipalités ou communes (431 au total, avec une population variant de 250 à 500.000 habitants) sont responsables des soins et services de santé primaires depuis 1984. L'état, par l'intermédiaire de quatre autorités régionales de santé, couvre tous les services de santé spécialisés.

Plus de 90% de tous les lits hospitaliers en Norvège sont concentrés dans les 80 hôpitaux appartenant à l'état et organisés en 31 entreprises sanitaires. Les services de santé spécialisés ont un système de financement hybride: les services psychiatriques sont financés par des subventions, tandis que les services somatiques sont en partie financés en bloc par des subventions, et en partie par un paiement à l'acte.

Les services hospitaliers en Norvège page 37

Par Dag Bratlid

Une réforme adoptée en 2002 donne au gouvernement central la responsabilité de tous les hôpitaux, organisés en cinq entreprises hospitalières régionales. Toutes les régions sanitaires comprennent un hôpital universitaire équipé en matériel et en personnel pour soigner la plupart des patients nécessitant un diagnostic et des soins spécialisés.

Certains services hautement spécialisés avec un petit volume de patient sont cependant organisés en monopoles ou duopoles nationaux au sein d'hôpitaux universitaires spécialisés. L'organisation régionalisée de la médecine hospitalière semble appropriée au maintien de l'équilibre entre qualité et accessibilité pour la plupart des patients, y compris dans les zones périphériques du pays.

Les soins de santé privés ont toujours été réduits en Norvège, et les hôpitaux privés sont de plus en plus dépendants de patients prêts à financer eux-mêmes leur traitement.

Tous les gestionnaires hospitaliers sont nommés soit par le conseil d'administration de l'entreprise régionale ou de l'hôpital, ou par le directeur d'hôpital. La plupart des chefs de département et des directeurs sont des médecins ayant bénéficié d'une formation administrative complémentaire.

L'association norvégienne des services hospitaliers et sanitaires page 44

Par Erik K. Normann and May Britt Buhaug

La NSH (Norwegian Hospital and Health Service Association) a été créée en 1937. Elle cherche à jouer un rôle actif dans le maintien d'une évolution appropriée et d'une utilisation des ressources adéquates des services de santé, ainsi qu'à encourager le dialogue et la confiance mutuelle entre personnel et client du secteur de la santé.

La représentation interdisciplinaire du NSH offre une occasion unique de se faire entendre dans le débat portant sur le recentrage autour des intérêts des clients et des patients dans les services de soins de santé norvégiens. L'association compte 240 membres et est la seule organisation de santé norvégienne à rassembler plusieurs professions et départements. H

Qualitätsmessung in Krankenhäusern in Europa - Auf dem Weg zu einem europäischen Akkreditierungssystem?

Anlässlich der diesjährigen ordentlichen EVKD-Mitgliederversammlung auf der Medica am 16. November 2007 in Düsseldorf veranstaltet die EVKD ein Seminar zum Thema Qualitätsmessung, schwerpunktmäßig der Akkreditierung, einem externen Evaluierungsverfahren als mögliches Instrument der Qualitätsmessung. Das Seminar wurde durch den wissenschaftlichen Beirat unserer Vereinigung vorbereitet. Es soll uns einen Überblick verschaffen über die bestehenden Systeme der Qualitätsmessung in verschiedenen europäischen Ländern und über die dort gesammelten Erfahrungen.

Diese sind uns wichtig. Wir stellen fest, dass einige Systeme mehrmals nachgebessert wurden, andere wegen auftretender Mängel oder zu komplizierter Handhabung abgesetzt wurden. Aus dieser Bestandsaufnahme hoffen wir dann ein europäisches Akkreditierungsmodell zu entwerfen, das einige unserer Nationalverbände ihren Staaten zur Übernahme empfehlen könnten. Da im Gefüge der Europäischen Union die alleinige Zuständigkeit für die Organisation von Gesundheitsleistungen grundsätzlich bei den Nationalstaaten liegt, ist dies wohl derzeit die einzige Möglichkeit, länderübergreifend in dieser Frage aktiv zu werden. Die EVKD appelliert jedoch an die EU, für die Entwicklung unterstützend tätig zu werden, insbesondere im Hinblick auf die in Kürze kommenden Vorschläge der EU-Kommission in diesem Bereich.

In Schlussfolgerungen eines Workshops organisiert von Beratern der EU-Kommission zur Beurteilung des Fortschreitens der Entwicklungen im Binnenmarkt, wird bereits eindeutig gesagt, dass die Qualitätsmessung und die hiervon abzuleitenden Vergleiche und Leistungsverbesserungen als sehr wichtig eingestuft werden müssen. Weiterhin heißt es, „der Definition, Messung und Auswertung der Qualität muss höchste Priorität zukommen."

Die von der EVKD initiierte Initiative bietet viele Vorteile. Krankenhäuser sind europaweit einem Wandel unterworfen. Ein gesteigerter Qualitätsanspruch der Patienten bis hin zur rechtlichen Einforderung, ein höherer Finanzbedarf der Krankenhäuser bei gleich-zeitig stagnierender, wenn nicht rückläufiger Zuwendung öffentlicher Mittel, Veränderungen des Berufverständnisses vieler Mitarbeiter im Gesundheitswesen und ein steigender Wettbewerb zwischen den Anbietern der gesundheitlichen Versorgung sind einige Merkmale dieses Wandels, die uns herausfordern. Erfahrungen und der Vergleich der Leistungsindikatoren zwischen Krankenhäusern bieten sich als Mittel an, um mögliche Behandlungsmisserfolge durch eine Ursachenforschung in der Fehlsteuerung zu vermeiden. Auch wenn manche dieser Fehlleistungen nicht unbedingt auf Versagen der bezogenen Berufsgruppen zurückzuführen sind, sondern durch landeseigene Vorgaben gesteuert werden. So berichtet der niederländische Volkskrant über die Studie eines renommierten Studienbüros, wonach sich die in den Niederlanden durchgeführte Fusion von Krankenhäusern als kontraproduktiv erweise.

Willy Heuschen

Die von den größeren Betriebseinheiten erwartete Kosteneinsparung und effizientere Planung seien ausgeblieben, hingegen hätten sich mehr Bürokratie und eine größere Anzahl an Führungspersonal eingestellt. Dadurch sei der Abstand zwischen Patient und Arzt gewachsen, sodass deutliche Qualitätsverluste verzeichnet würden. Dieses Beispiel zeigt, dass es sich lohnt von den Erfahrungen anderer und vor allem von anderen nationalen Voraussetzungen zu lernen.

Angesichts der Wichtigkeit dieses Themas würden wir uns freuen, viele Kollegen in Düsseldorf zu begrüßen und mit uns diesen wichtigen Baustein für eine Qualitätsverbesserung der Dienstleistungen unserer Krankenhäuser europaweit zu formen.

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.

NACHRICHTEN DER
EUROPÄISCHEN VEREINIGUNG DER KRANKENHAUSDIREKTOREN

DIE EVKD LÄDT EIN ZUM EVKD-SEMINAR AM 16. NOVEMBER 2007, DÜSSELDORF:

"Qualitätsbeurteilungssysteme in Krankenhäusern – Auf dem Weg zu einem freiwilligen europäischen Akkreditierungssystem?"

Das Seminar findet zeitgleich mit der EVKD Mitgliederversammlung und dem Deutschen Krankenhaustag statt. Beide Veranstaltungen werden während der weltgrößten Medizin-Messe MEDICA abgehalten.
Das Seminar ist gebührenfrei. Seminarsprachen sind Englisch und Deutsch.

Für Registrierungen melden Sie sich bitte per E-Mail bei josvanlanduyt@eahm.eu.org.
Mehr Informationen erhalten Sie auch unter folgender Nummer: + 32 2 733 69 01.
Eine Registrierung ist notwendig, es sind nur begrenzt Plätze verfügbar.

Vorläufiges Programm

Teil I

10:00 – 10:05 Begrüßung
Heinz Kölking, *EVKD Vize-Präsident*

10:05 – 10:20 Einführung
Asger Hansen, *Ehem. Präsident der EVKD, Präsident des Wissenschaftlichen Beirats*

Europäische (Über-) Sicht
Moderator: Asger Hansen

10:20 – 10:50
Qualitätsbeurteilungssysteme in Europa
Dr. Charles Shaw, *Berater, Großbritannien*

10:50 – 11:20
Das Marquis-Project
Prof. Rosa Sunol, *Avedis Donabedian Foundation, Spanien*

11:20 – 11:50
Pläne der Europäischen Kommission zu Gesundheitsdienstleistungen und der Qualität der Leistung
Dr. Andrzej Rys, *Direktor für Öffentliche Gesundheit, Europäische Kommission*

11:50 – 12:20
Auf der Suche nach hoher Leistungsqualität
Prof. Vleugels, *Direktor des Zentrums für Gesundheitsdienste und Pflege, Kathol. Universität Leuven, Belgien*

Mittagspause

Teil II

13:30 – 14:00
Verleihung des Golden Helix Award 2007
Vorstellen der Finalisten und des Gewinnerprojekts

Erfahrungen von Krankenhäusern in Europa
Moderator: Asger Hansen

14:00 – 14:30
Erfahrungen in den Niederlanden
Sprecher N.N.

14:30 – 15:00 Erfahrungen in Dänemark
Dorte Bagger, *Akkreditierungs-Koodinatorin, Region Hovedstaden, Dänemark*

15:00 – 15:30 Erfahrungen in Deutschland
Dietmar Nichterlein,
Direktor des Klinikum Chemnitz, Deutschland

15:30 – 16:30 Runder Tisch
„Die Zukunft der Akkreditierung in Europa"
Moderator: Manel Peiro,
Universität Ramon Llull – ESADE, Spanien

Schlussfolgerungen
Asger Hansen, *Präsident des Wissenschaftlichen Beirats*

IT und Medizintechnologie ziehen an einem Strang Seite 12

Von Joachim Hiller und Timo Baumann

Informationstechnologie und biomedizinische Technologie unterstehen einem stetigen Wandel. Klassische IT Komponenten werden automatisch zu medizintechnischen Komponenten, wenn sie im Gesundheitsbereich genutzt werden, vor allem wenn sie nahe am Patienten eingesetzt werden. Die Klinik am Eichert in Göppingen geht hier neue Wege. Ursprünglich voneinander getrennte spezialisierte Bereiche und Abteilungen arbeiten projektbezogen in einer dynamischen Wechselbeziehung mit klar definierten Schnittstellen. Die größte Herausforderung besteht demzufolge darin, eine menschliche Harmonie zu schaffen, die eine interdisziplinäre Teambildung erlaubt.

Molekulare Bildgebung, eine diagnostische Revolution Seite 14

Von Shahram Hejazi

Die molekulare Bildgebung ist eine Technologie, die Krankheiten früher und einfacher erkennt. Wenn die klassische Röntgendiagnostik Monate oder sogar Jahre braucht, einen Tumor erkennbar zu machen, gibt die optische molekulare Bildgebung eine Visualisierung der Zellenfunktionen und detektiert eine Anormalität viel früher, innerhalb von Tagen oder Wochen, und erleich-tert daher die Behandlung. Spezialisten wird ermöglicht die Aktivitäten der Zellen zu sehen und zu erkennen, ob ein Tumor gut- oder bösartig ist, mit konventioneller Bildgebungstechnologie nicht möglich.

Optische molekulare Bildgebung wird voraussichtlich den Krankenhausmarkt in den USA und Europa voraussichtlich innerhalb der nächsten fünf Jahre erreichen. Die Ausrüstung ist leicht zu bedienen und relativ kostengünstig, die Auswirkungen auf das Management nicht besonders erheblich. Krankenhausmanager müssen über diese neue Technologie informiert sein, um für die Bildgebung des 21. Jahrhunderts bereit zu sein.

Der französische klinische Ingenieur Seite 16

Von Martine Decouvelaere

In einem französischen Krankenhaus oder einer Klinik, ist die Rolle der klinischen Ingenieurabteilung die medizinische Ausrüstung zu verwalten, von der Planung bis zur Verschrottung. Es wird beraten bei neuem Krankenhausdesign, im Beschaffungsprozess und der Unterhaltung des Geräts.

Die Abteilung untersteht dem Hauptgeschäftsführer des Krankenhauses und ist meist Teil der technischen oder logistischen und Beschaffungsabteilung.

Das klinische Engineering ist und bleibt eine strategische Position im Krankenhaus. Das Wissen und die Fähigkeiten helfen der Geschäftsführung bei der Entscheidungsfindung in strategischen und allgemeinen Angelegenheiten, wie z.B.:

- welche technischen Ressourcen nötig sind und welche die effizienten sind, um die benötigte medizinische Leistung zu erhalten.
- welche Ausrüstung geeignet ist, um mit geringen Kosten die medizinischen Aufgaben bewältigen zu können
- welches die beste Organisation und die Kosten des Unterhaltungsplans sind, um die Sicherheit und operationelle Verfügbarkeit der medizinischen Ausrüstung sicherzustellen.

Verantwortlichkeiten im Hochkostenbereich OP Seite 20

Von Holger Otto

Auch im OP sind strukturelle Veränderungen angekommen, denn die Kliniken haben den Operationssaal als Hochkostenbereich identifiziert.

Hoch qualifizierte Mitarbeiter verschiedener Berufsgruppen arbeiten hier unter Einsatz großer Sachmittelressourcen auf engem Raum zusammen.

Es bedarf es guter Chirurgen, Anästhesisten und Pflegekräfte für qualitative hochwertige Ergebnisse, aber es gibt auch neue Verantwortlichkeiten: OP-Koordinatoren und OP-Manager, die für die Sicherung einer effizienten Ablauforganisation zuständig sind.

Der OP-Koordinator, ein Arzt oder hochwertige Pflegekraft, plant und steuert das Tagesgeschäft im OP. Er ist verantwortlich für den möglichst reibungsfreien Tagesablauf und die Integration von Notfällen.

Der OP-Manager, meistens ein Arzt oder ein Mitglied der Pflegedirektion, ist direkt der Geschäftsführung unterstellt und gestaltet die mittel- und langfristige Gesamtstrategie des OPs.

Ein Kooperationsmodell schaffen, um den Patientendurchlauf zu verbessern Seite 24

Von Christy Dempsey

Das *St John's Regional Health Center* ist ein 866-Bettenhaus im Südwesten Missouris in den USA. In 26 Operationssälen im Hauptkrankenhaus und 8 ambulanten Räumen für Tageschirurgie werden 31.000 Fälle jährlich behandelt.

Eine der ersten und wichtigsten Initiativen wurde im Oktober 2002 genommen, als Daten und die Theorien ans Tageslicht kamen, die eine Trennung der geplanten und ungeplanten Fälle befürworteten. Indem Fälle in zwei Bereiche geteilt werden, wird die artifizielle Variabilität reduziert und die Effizienz verbessert.

Im November 2002 wurde ein Zusatzraum geschaffen, in dem bis morgens, 6 Uhr früh, der Operation keine geplanten Behandlungen stattfinden.

Der Erfolg und der Zusatzraum haben das Vertrauen zwischen Klinikleitung und den Ärzten gestärkt, und damit noch größere Verbesserungen mit noch größeren Auswirkungen auf das Fallvolumen und im gesamten Krankenhausbereich möglich gemacht.

Ambulante Chirurgie in Frankreich: die Umsetzung Seite 26

Von Ayden Tajahmady und Maxime Cauterman

Den Bereich ambulante Chirurgie im Krankenhaus zu entwickeln ist eine strategische Option, die unternehmerische Fähigkeiten voraussetzt. Die Kommentare, die entsprechende Personen zudem hierüber abgeben, sind oft widersprüchlich und ungenau.

Wir haben festgestellt, dass die erfolgreiche Umsetzung dieser Option von vor allem zwei Akteuren abhängt: der medizinischen Direktion und der Pflegedirektion. Der medizinische Direktor ist der echte Unternehmer, der neue Fälle anzieht und seine Ärztekollegen überzeugt, mit der neuen Abteilung zu arbeiten. Die Pflegedirektion kann als Produktionsmanager angesehen werden, die für die Qualität der Leistung und den geleisteten Diensten am Patienten verantwortlich ist.

Eine solche Abteilung zu leiten braucht vor allem Augenmerk auf zwei Dinge: die Aktivitäten zu entwickeln und den Produktionsprozess zu kontrollieren. Es können verschiedene Organisationstypen beobachtet werden: einige Chirurgen beginnen ihr Morgenprogramm mit ambulanten Fällen, bei einer anderen Organisation werden Zeiteinheiten definiert, in denen die ambulanten Fälle behandelt werden, mit der ultimativen Gegebenheit, dass OP-Säle zur Verfügung gestellt werden.

Reduzierung wiederholter Aufnahmen und des Aufenthaltes durch Telemonitoring bei chronischerHerzinsuffizienz Seite 29

Von Christian Zugck, Janis Radeleff und Lutz Frankenstein

Strategien zum Diseasemanagement sollten sich nicht nur auf Arzneien beschränken, sondern auch Möglichkeiten der Reaktion bei Veränderungen des Gesundheitszustands und zur Koordinierung der Adaptierung des einzelnen Patienten mit seiner Krankheitsentwicklung und den entsprechenden Umständen. Telemedizin könnte der Schlüssel sein, um diese Voraussetzungen zu integrieren, die Kommunikation zu erleichtern und Krankenhausaufenthalte zu verringern.

Eine jüngste Meta-Analyse kam zu dem Ergebnis, dass Telemonitoring sogar effektreicher sein, um Krankenhausaufenthalte zu verkürzen als die Aufnahmen zu reduzieren, was wiederum weit reichende Konsequenzen auf die benötigte Krankenhauskapazitäten haben würde.

Eine unabhängige wirtschaftliche Analyse hat eine signifikante Verringerung der Kosten (ca. 3000 Euro pro Patient pro Jahr) bei Patienten festgestellt, die telemedizinisch versorgt wurden, da die Krankenhausaufenthalte verringert waren.

Das Dolmetschen über eine Telefonverbindung eröffnet eine kulturelle Dimension der Gesundheitsdienste Seite 34

Von Michael Greenbaum

Die Vereinigten Staaten sind ein Schmelztiegel diverser Kulturen, mit vielen ethnischen Nationen seit den Immigrationen unterschiedlicher Völker. Fast 11% der amerikanischen Population sind Ausländer und ca. 20% sprechen in ihrem Zuhause eine andere Sprache als Englisch.

Die Kommunikation in einer geeigneten Sprache mit einer wachsenden Zahl an Patienten, die nur

beschränkt Englisch beherrschen ist daher auch eine Herausforderung für die Gesundheitseinrichtungen und Krankenhäuser. Mit Dolmetschern im Haus sind die Möglichkeiten naturgemäß auf nur einige Sprachen beschränkt. Daher greifen die Einrichtungen auf telefonische Dolmetscher-Dienste zurück.

Der Artikel beschreibt im Detail das Funktionieren des größten amerikanischen Anbieters von Dolmetscherdienste per Telefon, der sich ausschließlich an Krankenhäuser richtet und von diesen 24 Stunden lang für zehnfache Sprachen benutzt wird.

Krankenhäuser und Gesundheitseinrichtungen in Europa stehen zunehmend vielen Sprachen gegenüber. Das telefonische Dolmetschen bietet eine Lösung, die Sprachprobleme auf eine rentable und qualitativ hoch-wertige Weise löst.

Das norwegische Gesundheitssystem — Seite 36

Von Bjorn Magne Eggen

Norwegen hat nur 4,7 Millionen Einwohner aber das Hoheitsgebiet erstreckt sich auf über 323.700 km², mit einer Nord-Südachse von 2.500 km.

Die Gemeinden (431 in der Anzahl, mit Einwohnerzahlen von 250 bis 500.000 Personen) sind seit 1984 für die Erstversorgung und die Pflegedienste verantwortlich. Der Staat deckt mit vier regionalen Gesundheitsbehörden die gesamten spezialisierten Gesundheitsdienste ab.

Mehr als 90% der Krankenhausbetten in Norwegen sind daher staatlich und in 31 Gesundheitsunternehmen organisiert. Spezialisierte Gesundheitsdienste haben eine Dualfinanzierung: psychiatrische Dienste werden durch Zuschüsse finanziert, während somatische Dienste teilweise blockfinanziert sind und teilweise mit einer Leistungsgebühr.

Krankenhausdienste in Norwegen — Seite 37

Von Dag Bratlid

In 2002 erfuhr das Krankenhaussystem in Norwegen eine grundlegende Reform, die der Zentralregierung die Trägerschaft sämtlicher Krankenhäuser übertrug. Die Krankenhäuser wurden in fünf regionalen Krankenhausunternehmen strukturiert.

Alle Gesundheitsregionen haben ein Universitätskrankenhaus, welches groß genug ist und gut genug ausgestattet, um die mei-sten der Patienten mit einer speziellen Diagnose und therapeutischen Bedürfnissen behandeln zu können. Einige hoch spezialisierte Dienste für nur eine geringe Anzahl an Patienten sind allerdings in nationalen Monopolen oder Duopolen bei ausgewählten Universitätskrankenhäusern vorhanden.

Die regionalisierte Organisation der Krankenhausmedizin scheint für die Beibehaltung des Gleichgewichts zwischen Qualität und Zugang für die meisten Patienten, auch in den abgelegenen Regionen des Landes, gerechtfertigt.

Die private Gesundheitsversorgung hatte nie einen großen Anteil in Norwegen und private Krankenhäuser sind zunehmend abhängig von der Zustimmung des Patienten, für die Behandlung selber zu zahlen.

Sämtliche Krankenhausmanager werden entweder vom Vorstand des regionalen Unternehmens berufen, vom Vorstand des Krankenhauses oder durch den Krankenhausdirektor. Die meisten Abteilungsleiter und Direktoren sind immer noch Ärzte mit einer Zusatzausbildung in der Verwaltung.

Die Norwegische Vereinigung für Krankenhäuser und Gesundheitsdienste — Seitte 44

Von Erik K. Normann und May Britt Buhaug

Die NHS (Norwegische Vereinigung für Krankenhäuser und Gesundheitsdienste) wurde 1937 gegründet. Ziel ist es, eine aktive Rolle in der Sicherstellung der richtigen Entwicklung und des richtigen Einsatzes der Ressourcen zu spielen und den Dialog und das gegenseitige Vertrauen zwischen Personal und Kunden im Gesundheitssektor zu unterstützen.

Die interdisziplinäre Repräsentation im NHS bietet große Chancen, sich in der Debatte und um die Entwicklungen der Patienteninteressen im norwegischen Gesundheitssektor Gehör zu verschaffen.

Die Vereinigung hat 240 Mitglieder (sämtliche 28 norwegischen Krankenhäuser sind Mitglieder) und ist die einzige Gesundheitsorganisation in Norwegen, welche die verschiedenen Berufszweige und Abteilungen abdeckt.

2007

October

2 - 6
10th European Health Forum Gastein "Creating a Better Future for Health in Europe"
Gastein, Austria
www.ehfg.org

11 - 12
6th Europäischer Gesundheitskongress
Münich, Germany
www.gesundheitskongress.de

11 - 13
15th European Conference on Public Health
Helsinki, Finland
www.eupha.org

18 - 19
Gobal Trends in Medical Writing and the Evolving Regulatory Environment, Madrid, Spain
www.diahome.org

22 - 25
The World of Health IT 2007 Conference & Exhibition
Vienna, Austria
www.europa.eu.int

26
Nurse-Led Care, Clinics and Services in Mental Health
Manchester, United Kingdom
www.healthcare-events.co.uk

31 - 1 Nov
European Lean Six Sigma Summit
Amsterdam, Netherlands
www.iqpc.com

November

8
Ehealth Congress 2007: ICT for Better and More Efficient Healthcare
Brussels, Belgium
Congresses.tmab.be/page/199/intro_-_e-Health_Congress_2007/

14 – 17
MEDICA and Deutscher Krankenhaustag
Düsseldorf, Germany
www.medica.de

16
EAHM General Assembly
Düsseldorf, Germany
www.aedh.eu.org

16
EAHM Seminar: Quality Assessment Tools in Hospitals – Towards a European Accreditation Model?
Düsseldorf, Germany
www.aedh.eu.org

26 - 27
Leadership Summit on Chronic Care
Amsterdam, Netherlands
www.worldcongress.com/chronic

27 - 28
Risk & Patient Safety 2007
London, United Kingdom
www.healthcare-events.co.uk

December

2 - 5
International conference 2007 – eHealth: Combining Health Telematics, Telemedicine, Biomedical Engineering and Bioinformatics to the Edge,
Regensburg, Germany
www.cehr.de

2008

February

16 - 17
Patienta, Essen, Germany
patienta.messe-essen.de

March

10 - 12
4th Annual World Health Congress – Europe 2008, Berlin, Germany
www.worldcongress.com

September

25 - 26
EAHM Congress "New Leadership for New Challenges",
Graz, Austria
www.aedh.eu.org

VERIFIED CIRCULATION according to the standards of International Business Press Audits

(E-)Hospital is independently audited by Accountskantoor Closset on behalf of the European Association of Hospital Managers

Publishing Company
EMC Consulting Group
28 rue de la Loi
B-1040 Brussels
e-mail: office@hospital.be
homepage: www.myhospital.eu

Publisher
Christian Marolt - c@emcconsulting.eu

Project Communications Director
Luiza Kudelka - luiza@hospital.be
Mark McComish - mark@hospital.be

Art Director
Carola Mücke - ca.mue@emcconsulting.eu

Subscription rates
One year : Europe 60 euros Overseas 84 euros
Two years : Europe 110 euros Overseas 150 euros

Production and Printing
Xerox Print
Print run
Hospital - 22,000

ISSN *Hospital:* E: 1374-321X


MÖLNLYCKE HEALTH CARE
Focus on: Inspection/Traceability
European Standard EN 13795
When does a reusable become unusable?
Is it after the first time? The second? The third? The thirteenth? You can't tell for sure. With BARRIER® drapes and gowns it is a different matter. You use it once. That's it. It is a safe and effective way to help minimise the risk of postoperative wound infections in the operating room. Every time.
For further information about the new European Standard EN 13795 please visit www.molnlycke.com
The Mölnlycke Health Care name and logo and BARRIER® trademark are registered globally to Mölnlycke Health Care

GE Healthcare

One exam. One visit. A new dimension in PET/CT brings it all together.

Introducing Discovery™ PET/CT with Dimension from GE Healthcare.
One scanner, one console, one exam. A new view in hybrid imaging maximizing the clinical benefits of both PET and CT. Dynamic gated PET. Comprehensive diagnostic CT techniques. Breakthrough image quality with real-time reconstruction. All in a single exam, helping you provide quick and easy studies, more confident decision-making, and improved diagnostic accuracy.
A new dimension in PET/CT, now a reality. **PET/CT Re-imagined.**

To learn more visit www.gehealthcare.com/re-imagine

GE imagination at work