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Heinz Kölking

EUROPEAN COOPERATION AND MANAGEMENT

The European process for integration continues. In Ireland, the vote in favour of the new constitution was clear. Further ratifications have been completed in national parliaments and the remaining final signatures to the Treaty on the new constitution are considered safe. Democracy is laborious but there is no better form of governmental organisation. In particular, the federalist design of decisions is an essential prerequisite for the distribution of legitimate constitutional power of governments and institutions.

However, we must be sure that this inherently complex process is transparent and controllable and that the principle of subsidiarity is maintained. This means that all things are governed more successfully "in house". Parent institutions have the task of building the framework of possibilities for action. Certainly a heavy demand, which requires a permanent balance of counterbalances but it is worthwhile.

The ongoing financial and economic crisis and the concerted cooperation between international management have clearly demonstrated the importance of common cooperation and how joining forces can mitigate crisis. Hospitals are also affected by these crises in various ways including the financing of investments. Furthermore, the very basis of financing health systems is affected by decreasing gross domestic product and increasing unemployment.

This dangerous development is further aggravated by the profound structural problems in European societies, which arise from the demographic change. Hospitals have to provide increasing medical and nursing care for older citizens. This is, however, only one side of the challenge. The structural problem is becoming clearer with the lack of qualified young people in

medicine and nursing. Strong management and collaborative action is needed at both national and European level.

All the more significant is the fact that it is the responsibility of the hospital management to address these issues on an entrepreneurial level. However, it is just as important that hospital directors focus on improving the structures and processes of healthcare provision at both national and European levels. The national associations of hospital directors as well as the European Association of Hospital Managers serve as a platform for this activity.

We need to constantly review the basic organisation of our organisations both in terms of objectives and activities as well as in relation to structures. So all of us are asked to make the things for which we are responsible the best they can be every day instead of simply forecasting bad scenarios.

The next opportunity to discuss an important question regarding the structural development of our hospitals is the EAHM seminar during MED-ICA in Düsseldorf on German Hospital day. The topic of choice is "Towards a Balanced Cooperation of Public and Private Actors". We look forward to a lively discussion.

Heinz Kölking,
Vice-President EAHM



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



Financing

Financing is a key issue for hospital management. This issue we explore several areas of financing. Marek Pavlík and Zuzana Darmopilová discuss the pros and cons of voucher schemes in public insurance health systems using the Czech healthcare system as a theoretical example. This is followed by an introduction to public private partnerships in healthcare. Heinz Kolkling discusses system partnerships; he uses the successful partnerships already in place his hospital Diakoniekrankenhaus Rotenburg to show how such partnerships can improve quality, efficiency and efficacy in a financially viable fashion. The cover story finishes with an analysis of Diagnosis Related Groups and their effects on quality of care and management.

Sustainable Healthcare

The environmental question is looming large in all sectors and the healthcare sector is no different. Paul Whaley from Health Care Without Harm Europe gives us a glimpse of healthcare's sustainable future; showcasing the New Karolinska Solna (NKS) and its ambitious sustainability targets including the ultimate goal of zero carbon dioxide emissions. From solar power to sustainable building materials the article offers many interesting ideas for ensuring environmentally friendly healthcare. Also in focus is a NHS Trust designed as a statement building to beat NHS energy targets. The trust invests in renewable energy in the form of ground source heat pumps and photovoltaic cells.

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Focus: The Netherlands



According to the annual Euro Health Consumer Index, the Netherlands has the best healthcare system in Europe. It topped the European survey for the second year running scoring highly in waiting times for patients, e-health and access to medication. What makes the Dutch healthcare system so special?

This focus we learn how reform in 2006 saw the implementation of a new system of health insurance based on risk equalisation creating a balance between a solid social basis and market dynamics and putting the patient centre stage. Michael Tan informs us of e-prescribing in the Netherlands, in his opinion a key foundational step towards fully-fledged e-health services and we learn more about the history and activities of the Dutch association of healthcare directors.



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DEDICATED TO **HEALTHCARE IT**

EAHM was proud to collaborate with the European Association of Healthcare IT Managers in the organisation of the *IT @ Networking Awards 2009 (IT @ 2009)* which took place 29-30 October 2009 in Brussels. *IT @ 2009* is an innovative event with the aim of bringing the latest healthcare IT solutions to the pan-European stage.

Mr Willy Heuschen, Secretary General of EAHM was there to represent the association. During his Welcome Address he stressed the importance of healthcare IT to hospital management and that many managers are striving to learn more about the sector. He commented that the right IT solution can increase cost-effectiveness, productivity and precision but also that healthcare IT is a complicated sector that can often seem daunting to hospital managers, especially considering a bad investment can have disastrous effects. For this reason EAHM is working to keep members informed so that they can make the right decisions.

He reiterated EAHM's dedication to healthcare IT mentioning the new Working Group for IT recently set up within the association.

The purpose of this group is to further explore the opportunities and possibilities healthcare IT brings.

DG Information Society and Media Commissioner Viviane Reding gave an inspiring E-address following the final voting and awards ceremony in which she emphasised the importance of utilising IT in healthcare given the current financial crisis and issues of cross-border patient care throughout Europe. She applauded the efforts of the organisers and participants of *IT @ 2009* in furthering the development and deployment of innovative e-health solutions.

The event was certainly a great learning opportunity for all who attended. During the first day MINDBYTE sessions over 20 projects were presented illustrating proven benefits that hospital managers can appreciate: Minimised administration costs, enhanced quality and security and ease in workflow. The top five projects selected by the audience thanks to a state-of-the-art, peer-to-peer electronic voting system made it through to the second day WORKBENCH sessions.

After in-depth presentations and question and answer sessions for each project the audience made their choice: The SISRA Health Information System and DPPR Shared and Distributed Patient Record, implemented in the Rhône-Alpes region of France presented by Dr. Pierre Biron.

The data capture and storage network is built and reinforced by an innovative identification access system for patient and professional health ID cards, which guarantees security and confidentiality, anytime, anywhere. Most vitally, it allows patients to remain gatekeepers of their own personal records, thus providing a hands-on answer to one of the most vexing questions confronting e-health everywhere: who owns and controls patient data?

Second place was awarded to "Digitisation of the Nationwide Breast Cancer Screening Programme in The Netherlands" (presented by Bart Verdonck, the Netherlands).

Third place went to "From Free Text to Standardised Language – The National Development Project of Nursing Documentation in Finland" (presented by Kaarina Tanttu, Finland).

AGENDA for the 39th Ordinary General Assembly

The meeting will be held on Friday, 20 November 2009 from 17.00 – 18.30, at Messe Düsseldorf, CCD-Ost, Düsseldorf (Germany)

1.	Approval of the agenda	5.	Economic plan for 2010
2.	Approval of the minutes of the 38th Ordinary General Assembly, held on Thursday, 25 September 2008 in Graz, Austria	5.1.	Approval of the proposed membership subscription fees of full members and associate members (2.4.c of statutes)
3.	President activity report 2008-2009	5.2.	Approval of the economic plan for 2010
4.	Tendering of accounts for 2008	6.	Election of auditors for the year 2009
4.1.	Presentation by the Secretary General	7.	Admission and exclusion of members
4.2.	Auditors' report	8.	EAHM Congress 2010, Davos
4.3.	Approval of accounts for 2008 and discharge of the Board and the Secretary General	9.	Next Ordinary General Assembly 2010

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NETWORKING AWARDS 2009 REVIEW

On October 29-30 European healthcare IT professionals joined together at Square in Brussels for the first *IT @ Networking Awards (IT @ 2009)*, a unique event which shone a much needed spotlight on healthcare IT innovations and solutions. The stakes were high: An unrivalled cash prize of 5000 euros as well as the coveted *IT @ 2009* trophy and extensive press coverage in Europe's leading healthcare management journals for the winning project. With 78 submitted projects this event was a resounding success. The top 23 nominees were selected to present their MINDBYTE presentations on the first of this two day event.

The organisers- the European Association of Healthcare IT Managers (HITM) and the European Association of Hospital Managers (EAHM) created *IT @ 2009* on the basis that there was a lack of recognition of the innovators of healthcare IT on a pan-European level. They also believe that healthcare professionals who use IT solutions on a daily basis are best placed to judge the value of new projects.

Unifying Healthcare IT Across Europe

The healthcare IT industry is not immune to the effects of rapid globalisation and emerging competition from China and India. The US is also reengaging itself in the industry despite current economic downturn. Christian Marolt, Secretary-General of HITM addressed this important issue in his



EU Commissioner Viviane Reding

opening address. He stressed the need for Europe to collaborate – to join together, not only to survive in healthcare IT for the years to follow – but to lead. Secretary-General of EAHM, Willy Heuschen stressed the core importance of healthcare IT and innovation for hospital managers.

EU Commissioner for Information Society and Media, Viviane Reding gave an inspiring e-address, in which she emphasised the importance of utilising IT in healthcare given the current financial crisis and issues of cross-border patient care throughout Europe. She applauded the efforts of the organisers and participants of *IT @ 2009* in furthering development and deployment of innovative e-health solutions.

Entertaining Networking Opportunities

Delegates gathered at the Grand Casino Brussels to celebrate the finalists from the

first day of competition and to network with healthcare IT colleagues from across the continent. *IT @ 2009* participants, organisers and corporate sponsors were treated to drinks and canapés and a lively demonstration of black jack and roulette at the Casino's Cotton Club. The evening culminated in the draw for the order of presentations in the final WORKBENCH sessions.

Electronic Voting System

As *IT @ 2009* believes in peer to peer voting, the winning project was chosen not by the usual panel of expert judges, but by the audience of hospital CEOs, CIOs, CMIOs and hospital and healthcare IT managers. This was made possible thanks to a state-of-the-art electronic voting system. After each presentation the audience decided whether or not the presentation fulfilled the outlined criteria by pressing the relevant button on their personal keypads.



Willy Heuschen, EAHM

AND THE WINNERS ARE...



Winners: Kaarina Tantt, Emile Knops, Dr. Pierre Biron and Bert Verdonck



The Winning Project

Dr. Biron from the Centre Léon Bérard in Lyon was awarded first prize. He and his team showcased the SISRA Health Information System and DPPR Shared and Distributed Patient Record, which have been implemented in the Rhône-Alpes region of France.

SISRA is a unique data capture and storage network built and reinforced with a strong identification access feature- allowing only patient and professional health ID cards clearance. Patient information is available securely and confidentially when and where needed—allowing patients to remain the gatekeepers of their own personal records.

Second Place

Digitisation of the Nationwide Breast Cancer Screening Programme in The Netherlands (presented by Bert Verdonck)

The National Institute for Public Health and the Environment (RIVM) provides a free nationwide breast cancer screening service for all women between 50 and 75 years of age. This programme is now digitised and referred to as DigiBOB. The service allows radiologists to access new and historical patient data, including multiple mammograms, in seconds. It claims to be the first digitised programme of its kind in the world.

Third Place

From Free Text to Standardised Language – The National Development Project of Nursing Documentation in Finland” (presented by Kaarina Tantt).

The Nursing Minimum Data Set (NMDS) is a part of the core data elements of national EHR. The national nursing documentation model and the Finnish Care Classification (FinnCC) were developed in the national nursing documentation project 2005-2008. NMDS and FinCC were integrated during 2005-2007 into 8 health recording systems in 33 healthcare organisations. As a result, the quality of nursing documentation is more uniform.



Dr Pierre Biron receiving his prize

Looking Forward

Both HITM and the EAHM were overwhelmed by the positive response and look forward to an even more successful *IT @ Networking* next year. As HITM Secretary General, Christian Marolt stated, “It is clear that here in Europe, we also have outstanding healthcare IT jewels. As a non-profit body, we are doing whatever we can to get these innovations recognised globally. EU opinion leaders, politicians and policy makers also need to show their support, just like their counterparts in the US.”

IT @ Networking 2010 promises to be bigger and better with more groundbreaking innovations and networking opportunities. See you in Brussels in October 2010! More details to follow.

UK

New Technical Guidance Website for Providers of Healthcare Facilities

The new website 'Space for Health', linked to the Department of Health's website, brings together a whole suite of guidance (including Health Technical Memoranda, Health Building Notes and other information) into one online resource for all those involved in the procurement, management, design and planning of healthcare facilities, including NHS and non NHS providers.

Users are able to seamlessly shift between different pieces of guidance, and access nation-specific information, depending on whether their project is in England, Scotland, Wales or Northern Ireland. 'Space for Health' has been developed following an extensive three-year consultation period, including stakeholder events and evaluation of a pilot website. Health Minister, Mike O'Brien said, "This brings together all the guidance in one easy to access website."

To visit the website:
www.spaceforhealth.nhs.uk

New Consultation on Personal Health Budgets Launched

Care Services Minister Phil Hope Launched a new consultation on Personal Health Budgets. Personal health budgets are being piloted in primary care trusts until 2012 – direct payments will form part of these. Personal health budgets will help to create a more personalised NHS, by giving people more choice and control over how money is spent on their care.

Personal health budgets can work in three ways: A notional budget held by a commissioner; a budget managed on the individual's behalf by a third party, or a cash payment to an individual. Trusts are already able to offer the first two options, which do not involve giving money directly to individuals. The consultation seeks views on the rules for making direct payments as well as proposals for setting up and evaluating direct payment pilots. It will run until 8 January 2010. This consultation will inform the regulations and guidance to make direct payments happen.

The Netherlands Dutch Biobank Network

The Dutch government has awarded a consortium of health research groups 22.5 million euro to establish a national biobanking infrastructure. The project, Biobanking and Biomolecular Resources Infrastructure Netherlands (BBMRI-NL), will integrate valuable clinical data and material in order to improve access to human samples.

This project will attempt to improve the accessibility and enrichment of biological and clinical data while exercising privacy protection regulations. The initiative is part of a wider 170m euro network that will eventually link European biobanks and related information resources to connect researchers across the continent.

Eight university medical centres and several other research institutes and universities are participating in the project. Professor Gertjan van Ommen, from Leiden University Medical Centre in the Netherlands, applied for the grant from the Dutch Ministry of Education through the Netherlands Organisation of Scientific Research. He believes that the integration of data and materials will accelerate research into causes and development, therapy and prevention of disease.

Denmark Telehealth Pilots Rolled-Out

Denmark has rolled-out two telehealth pilots it now intends to implement nationally over the next three years. One of the pilots, already rolled-out at the Odense University Hospital, involves using a video conferencing service to allow foreign patients who don't speak Danish to communicate with hospital staff.

The service is linked to a call centre with multi-lingual operators allowing foreign patients to have their needs and concerns translated to receive a better diagnosis. The first interpretation centre was opened at the beginning of June 2009. Following its success, regional implementation of the system is expected by 2010, with a national roll-out to be completed by 2012.

The second pilot monitors around 800,000 unstable chronic obstructive pulmonary disease patients from their home. Patients who are thought to be more comfortable at home than in hospital receive a suitcase of video

conferencing equipment and monitoring devices and the nurses do their normal rounds over a video conference system where they record the patients' vital signs.

Spain Researchers Develop RFID Alert System for Elderly

Researchers at the University of Granada in Southern in Spain have developed a system that reminds elderly people and those with special needs when they forget everyday tasks like taking medication.

The system recognises the everyday actions of the user by using radio frequency identification labels. These labels are placed on objects that the individual touches most often and are used to communicate with a computer or mobile device situated in the house or at a nearby assistance centre.

The activities of users are assessed with artificial intelligence techniques to compile a list of actions such as remembering to take keys or a mobile phone before leaving the house. The system can monitor the individual's movements by assessing when they touch an object. A small alarm will go off followed by a reminder on a mobile device to prompt the user to take action.

The system is said to be beneficial to those who reject the help of others and insist on keeping their independence. In this regard, the system will not change the life of the user but the lives of those who care for them.

Germany Action Clean Hands

The Action Clean Hands campaign has set itself the goal to establish hand disinfection as a focus for enhancing the quality and safety of patient care in hospitals in Germany by the year 2010. This issue has become even more important with the current spread of influenza.

As part of the campaign, a workshop on hospital hygiene was organised on November 12th in Frankfurt. Experts were invited to talk about personal and organisational measures and practices for hand hygiene taking into consideration legal and technical requirements.



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EUROPEAN HEALTH FORUM

By Rory Watson

Tomorrow's hospitals must be far more flexible than their predecessors. They must be less wedded to the static concept of bed numbers and more adaptable to patients' changing needs. That was one of the messages directed to participants at this year's annual European Health Forum in Gastein, Austria.

Professor Martin McKee, the Research Director at the European Observatory on Health Systems and Policies, believes that hospital architects and planners need to show greater imagination. "We are concerned hospitals are still being built to reflect the needs of patients from the nineteenth and twentieth centuries, not the twenty first," he said.

The advocates of a new approach have set out their arguments in *Investing in Hospitals of the Future*. They argue that rather than working on the basis of bed numbers, the emphasis should be on issues such as the frequency of

contacts between doctors and patients and the number and type of operations that may be carried out. All too often, they add, projects are driven by short-term tactical considerations, notably the political desire to build a new hospital, rather than an analysis of long-term strategic performance and need. Steve Wright, one of the authors, acknowledged that taking such considerations into account could complicate initial design and planning, but maintained this would lead to greater efficiency in day-to-day activities.

Similarly, the publication notes that giving higher priority to factoring running costs, such as heating, into the planning process would reap dividends, particularly since the cost of building a new hospital is only two to three times annual operating expenditure. As an example, Bernd Rechel, a lecturer at the London School of Hygiene and Tropical Medicine, pointed out that it was just 2 percent more expensive to build single bed rooms instead of the traditional four-bed model. "If the individual rooms are properly adapted, patients do not need to be moved around so much, thus reducing the chances of their falling or of giving them the wrong medicine," he noted.

Supporters of changes in hospital design also stress that wider considerations should be taken into account. Energy efficiency will become increasingly important as efforts are taken to tackle climate change. Attention needs to be given to satisfying the different interests and needs of patients, staff and the local community and to con-

structing pathways through the hospital system so that care is organised in a smooth flow, minimising unnecessary waiting, mistakes and inappropriate procedures. Finally, thought should also be given to possible future uses of the premises, such as offices or hotels, once they have outlived their practical use. Inequalities in healthcare was another of the themes examined at this year's Gastein Forum and, coincidentally, it is also an issue the European Commission addressed at the end of October with publication of a policy paper to reduce such inequalities within the European Union.

As Androulla Vassiliou, the EU health commissioner, explained: "I want to see a Europe where everyone has the opportunity to enjoy a high

level of health regardless of where they live or their social or ethnic background. We have recognised that health inequalities need to be tackled."

While public health standards have undoubtedly risen across Europe in recent years, significant dif-

ferences remain in basic indicators such as mortality rates, incidence of disease and available treatment. Life expectancy at birth varies from up to eight years for women and 14 for men. These differences could be exacerbated if the current economic crisis hits groups, notably the unemployed, which are most vulnerable.

In practical terms, Mrs Vassiliou, wants to see the EU give health issues a higher priority when drafting its various policies and to back this with finance from its many funding programmes, in particular the billions of euro spent annually on regional and social projects. Some of this expenditure, which is traditionally directed at large infrastructure schemes, could then be used for primary healthcare facilities, water, sanitation and housing renewal.

Member states would have to give their agreement to open up these new avenues for EU spending and Commission and national officials are currently examining what new possibilities would be feasible. Ideas already on the table include using EU funds to co-finance national health information and promotion campaigns and to encourage wider use of e-health.

Politically, the Commission's move is significant. It has been tabled just as crucial negotiations are set to begin next year on the future size and shape of the EU's annual budget and the policy priorities it should support.

Energy efficiency will become increasingly important as efforts are taken to tackle climate change



EU Criticised Over Online Medicines

European politicians are criticising the EU's decision not to legislate against online pharmacies claiming that is a huge omission in the plans to combat counterfeit medicines. German MEP Jorgo Chatzimarkakis, said that the online trade in fake medicines is a growing illegal business that needs to be addressed.

The EU 'pharma package' of legislation unveiled in December 2008 in Brussels focussed on three priority areas including protecting the European market from counterfeit medicines, improving pharmacovigilance to reduce the adverse effects of medicine and improving information for patients on prescription medicines.

The World Health Organisation say that 80% of counterfeit medicines come from the Internet but the directive failed to mention how to combat the sale of counterfeit drugs online.

For more information, please visit: www.ec.europa.eu/enterprise/pharmaceuticals

Commission Tackles Health Inequalities in the EU

The European Commission has announced a series of actions to help Member States and other actors tackle the gaps in health which exist between and within countries in the EU. Despite increased prosperity and overall improvements in health in the EU, health differences between and within countries persist and in some cases are increasing. Difference in life expectancy at birth between Member States reach up to 8 years for women and 14 years for men.

The Commission initiative identifies action for improving knowledge on this issue, better monitoring and data collection, more assessment of how EU policies can tackle health inequalities and work with countries, regions and stakeholders. The EU will support Member States and stakeholders to identify what works best and how to put this into practice. It will produce regular statistics and report on the size of inequalities in the EU and on successful strategies to reduce them. It will help countries to use EU funds to improve health of the worst off and narrow health gaps between regions – such as primary care facilities, water and sanitation and housing renewal. A first report on progress will be produced in 2012.

For more information, please visit: www.ec.europa.eu/social

Commission Launches Youth Health Initiative – “Be Healthy, Be Yourself”

The initiative, launched by European Commissioner for Health Androulla Vassiliou, encourages more young people to become actively involved in developing EU health policies. It was kick-started with a conference on Youth Health in Brussels in July allowing over 200 young people to meet with policymakers and health organisations and debate key health issues with them. Topics included alcohol, tobacco, drugs, mental health and physical activity and the financial crisis, inequalities in health, education and the role of the media.

Androulla Vassiliou, EU Health Commissioner said: "Even though the health of young people in Europe is better than it has ever been, there are worrying signs that far too many young people adopt behaviours which, in the long term, will reduce their ability to lead healthy and productive lives, thus endangering their future. My aim is to motivate the youth of today to care about their health, engage with policymakers and speak out on health matters."

The aims of the Youth Health Initiative are to involve young people more closely in EU health policies, strengthen youth partnership in the decision making process, involve other sectors across EU policy areas and at national level on the implementation of prevention programmes targeted at young people and support Member States' activities on the health of young people.

For more information, please visit: www.health.europa.eu/youth

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VOUCHER SCHEMES IN A PUBLIC INSURANCE HEALTH SYSTEM: A PROFITABLE INITIATIVE?

By Marek Pavlík, Zuzana Darmopilová

Healthcare markets are traditionally perceived as arenas characterised by “rationalised” state regulations that aim to fulfil four key goals of healthcare systems: equity, efficiency, effectiveness and patient satisfaction. Due to this fact, both the supply and the demand sides can be regulated. Voucher schemes can be seen as those instruments stimulating the demand side; the purchasing power is transferred to the client. This article will discuss the advantages and disadvantages of vouchers in healthcare systems with public insurance systems like the Czech Republic, taking into consideration the points of view of the key actors involved.

Theoretical Framework

Vouchers are typically used in education or social systems. One of the earliest suggestions for government use of vouchers was put forward by M. Friedman in 1962 as a way to fund education without excessive government intervention in the schooling market. Vouchers typically transfer purchasing power to the client. The aim is to empower the household to pick the school (public or private) that best suits parental preferences and the child's needs and to allow low-income families access to private schools. It therefore places the onus on the school to provide quality education, and to attract the household's voucher. The result is that schools perceived as ‘high quality’ attract more students, receive many vouchers, and prosper.

“Health” vouchers could be used as a tool to increase the choice of providers for patients or targeting subsidies to the poor and/or high risk/vulnerable groups for example. Vouchers may provide a means of funding healthcare services. However, using vouchers in the healthcare sector seems to be more problematic than in the education system; the history of well known health market failures to name one problem. Patients’ choice of healthcare providers is also limited due to capacity problems (e.g. waiting lists), local and time service availability, and inability to evaluate the quality of service.

The Czech healthcare system is a public insurance system with a low level of co-payments. Therefore, the price information has no meaning for decision-making. The exceptions are dental services, but informa-

tion about prices is generally inaccessible. As a result, patients’ opinion about quality is based on personal experience and “public opinion”. In fact, if a provider (hospital or physician) is considered as a top quality provider then they become overloaded and experience capacity problems.

So, theoretically there are crucial questions important for the evaluation of the advantages of vouchers:

- ▶ Who is eligible for the voucher? How is the voucher distributed and what are the costs of distribution?
- ▶ What service is demanded through the voucher and who (which institution) is obliged to reimburse the value of the voucher?
- ▶ Are all healthcare providers obliged to accept these vouchers (public as well as private provides) or only selected providers?

Studies on the subject often introduce cases from countries where a part of the population have limited access to basic healthcare services, generally due to lack of financial resources. Some authors consider the universal voucher system as a way of resolving current problems in the US healthcare system, but could vouchers be a suitable tool for public insurance system?

In our previous paper, “Voucher schemes – threat or opportunity for the Czech Healthcare sector?” we concluded “that vouchers in the healthcare sector under peculiar conditions of the Czech Republic have very limited potential to use. There is no definition of standard services (covered by the public in-

surance) and above standard services (paid by the patient) and each “necessary” service is theoretically available for each patient (statement – part of description of the Czech healthcare system). The patient has a right of free choice of specialist as well as facility. Because of that, we could expect that patient choice of provider would be the same with or without vouchers. Vouchers have no impact on waiting lists or other capacity problems”.

Vouchers seem to be suitable in three cases:

1. Vouchers for “above standard” and “preventive” care, to encourage responsible behaviour by patients. However, the same function should fulfil “the benefit system” provided by the health insurance companies.
2. Vouchers for socially excluded groups – distributed by NGOs or state institutions in paper form, they can be more enticing than usual “benefit programmes”. However this possibility represents some kind of fiscal illusion.
3. Vouchers for illegal immigrants – distributed by NGOs (supported by the government) represent tools for support to the excluded vulnerable group.

The following section focusses on the advantages and disadvantages of vouchers from the point of view of each respective actor involved. The analysis is based on the assumption that healthcare has defined “standards” of services covered by public (private) insurance. The advantages and disadvantages of voucher scheme are discussed using two examples. Cases chosen as the examples could be considered as “less” problematic rather than general vouchers system implementation.

Table 1: Advantages and Disadvantages Summary for Example 1 “Socially Excluded Groups”

	Advantages (benefits)	Disadvantages (costs)
Recipients	<ul style="list-style-type: none"> ▶ No barriers for entrance into the health-care system ▶ Health benefits 	<ul style="list-style-type: none"> ▶ Losing free choice of provider in the case of limited providers accepting vouchers (if the voucher acceptance is voluntary) ▶ Economic status is revealed (shame of being poor)
Physicians	<ul style="list-style-type: none"> ▶ Theoretically time saving which is necessary for the treatment (i.e. physician’s capacity of number of patients could be increased or physician could have more time for current patients) 	<ul style="list-style-type: none"> ▶ More administrative stress ▶ Economic cost of administration ▶ Possible delay in “voucher reimbursement by the state institution”
Pharmacists	<ul style="list-style-type: none"> ▶ No advantage 	<ul style="list-style-type: none"> ▶ More administrative stress ▶ Economic cost of administration ▶ Possible delay in “voucher reimbursement by the state institution”
State	<p><i>Indirect economic benefits</i></p> <ul style="list-style-type: none"> ▶ Prevention and early care could decrease of risk serious illness. More prevention=less expensive treatment ▶ Possible economic benefit from future revenues of recipient* 	<p><i>Direct economic cost</i></p> <ul style="list-style-type: none"> ▶ Costs of distribution of vouchers ▶ Costs for reimbursement of vouchers <p><i>Other impacts</i></p> <ul style="list-style-type: none"> ▶ Probably no impact on quality competition among providers

Source: Authors (* We assume that a healthy person would have better chance in the labour market and consequently as an employee, would pay taxes and health and social insurance.)

Example 1:

Vouchers for Socially Excluded Groups

Aim and target group: Healthcare for people in financial distress (as defined by law).

Considered problem of this group: Patient (member of this group) has shortage of mon-

ey for visiting a physician (fee for visit) and also for buying medication (patient’s co-payment).

Considered solution: Vouchers allowing free visits to physicians; vouchers guaranteeing free access to medication (group of medications defined as basic for given illness).

Actors influenced by the vouchers provision:

Physicians; pharmacists; recipients; state.

Distributor of voucher: Social security institutions.

Crucial condition: There is no chance to trade with vouchers or exchange them for cash.



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Table 1: Advantages and Disadvantages Summary for Example 2 “Model Patient”

	Advantages (benefits)	Disadvantages (costs)
Recipients	<ul style="list-style-type: none"> ▶ Motivation to continue with desirable behaviour/start with “correct” behaviour 	<ul style="list-style-type: none"> ▶ Time (and cost) for preventive care ▶ Health restriction after blood donation
Providers	<ul style="list-style-type: none"> ▶ Increasing interest for services granted by the voucher ▶ Increase in number of blood-donors 	<ul style="list-style-type: none"> ▶ Administrative stress ▶ Economic cost of administration
State	<p><i>Indirect economic benefits</i></p> <ul style="list-style-type: none"> ▶ Preventive care could decrease risk of serious disease. More prevention=less expensive treatment <p><i>Other impacts</i></p> <ul style="list-style-type: none"> ▶ A healthier population means more contributors for the healthcare and tax systems 	<p><i>Direct economic cost:</i></p> <ul style="list-style-type: none"> ▶ Costs of distribution of vouchers ▶ Costs for reimbursement of vouchers <p><i>Other impacts</i></p> <ul style="list-style-type: none"> ▶ Probably no impact on quality competition among providers
Health insurance companies	<ul style="list-style-type: none"> ▶ Better structure of insurance stock ▶ Preventive care could decrease the risk of serious disease and therefore decrease use of highly expensive treatment 	<ul style="list-style-type: none"> ▶ Administrative stress ▶ Economic cost of administration ▶ Less scope for their own motivation programmes

Source: Authors

Example 2: Vouchers for “Model Patients”

Aim and target group: Provide extra benefit for patients who keep all obligatory prevention procedures; or vouchers for blood-donors.

Considered problem of this group: Motivate all insured in the healthcare system to keep up preventive care; or motivate people to become blood-donors (blood-donors received no monetary reward in the Czech healthcare system).

Considered solution: Voucher for extra services (exactly defined – e.g. spa, massages, free preventive care which is normally provided only as paid service (e.g. whole body examination as a prevention of cancer).

Actors influenced by the vouchers provision: Providers; recipients; state; health insurance companies.

Distributor of voucher: Health insurance companies, transfusion centres.

Crucial condition: There is no similar system of motivation (i.e. benefits from health insurance companies).

Conclusion

Although introduced examples were only theoretically discussed, we can conclude that the voucher system has (limited) potential for use. From the providers’ point of view there is a lack of advantages for voucher implementation. Vouchers cannot be implemented without increasing administrative stress. Providers perceived as the top quality bearers could have problems with over-supply. So providers are not motivated to support voucher implementation, however they are

considered as the group whose support is crucially needed for successful implementation of any public policy.

For the successful implementation of a voucher scheme, support from providers and health insurance companies (HICs) is crucial. Providers have no direct benefits from voucher schemes and HICs (aside from above mentioned benefits) could perceive the vouchers as a tool for restricting their competition area and decreasing their autonomy.

But how to increase support from providers? The answer could be simple: Advantages for providers should be increased. In other words, providers should benefit from the system like the other actors. The second question is how to increase support from the health insurance companies. HICs’ support depends on whether the benefits for providers could be perceived as tool against competition among HICs. Gathering support from HICs means that sufficient room for competition has to remain.

From a managerial point of view, the voucher system could work if administrative obstacles were eliminated and the whole process was clear and simple, from voucher distribution, utilisation by the recipient, to reimbursement of vouchers. We suggest the following principles valid for a public insurance system with low patient co-payments like the Czech healthcare system:

- ▶ Distribution of vouchers should be the responsibility of NGO’s and/or of state institutions (e.g. social security institution) but all vouchers must have the same paper format and work on the same principle.

- ▶ Utilisation of health service by the recipient should be the same as for patients without vouchers: Vouchers work like money. Inspiration should be taken from food-tickets system for employees (the tickets are distributed by employers and accepted in most restaurants).

- ▶ There should be no possibility to trade vouchers.
- ▶ Reimbursement should be “provider friendly” with no extra waiting time for voucher reimbursement. In fact, as a benefit for providers accepting vouchers, better reimbursement time conditions or higher level of reimbursement could be proposed. On the other hand, such support to providers could induce other problems in the healthcare system, particularly the attitudes of HICs.

As we have illustrated, implementing a voucher system for healthcare could bring benefits for all relevant actors involved. However, the scheme is not without disadvantages and should therefore be approached with caution. Inappropriate implementation of such a system could create friction between actors or have no real impact on possible recipients’ health.

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PUBLIC-PRIVATE PARTNERSHIPS IN HEALTHCARE

By Dr. Silvia Ondategui-Parra

Public private partnership (PPP) refers to an arrangement between the government and the private sector, with the principal objective of providing public infrastructure, community facilities and other related services. Such long-term partnerships are characterised by a sharing of investments, risks, rewards and responsibilities for the mutual benefit of both parties involved.

A survey in 2001 showed benefits of PPPs to include high quality facilities and infrastructure, with construction completed as planned, on time and within budget; staff and user satisfaction; responsiveness of the private sector; efficient development of output specifications, economies of scale, innovative technologies, more flexible procurement and compensation arrangements and reduced overheads.

Different types of public-private partnerships include:

1. The introduction of private-sector ownership to state-owned businesses, using the full range of possible structures and with the sale of either a majority or minority stake;
2. Private finance initiatives and other arrangements, where the public sector contracts to purchase quality services on a long-term basis so as to take advantage of private sector management skills incentivised by having private finance at risk, and
3. Selling government services to wider markets and other partnership arrangements where private sector expertise and finance are used to exploit the commercial potential of government assets, for example, through the various types of PPPs.

Adopting PPP

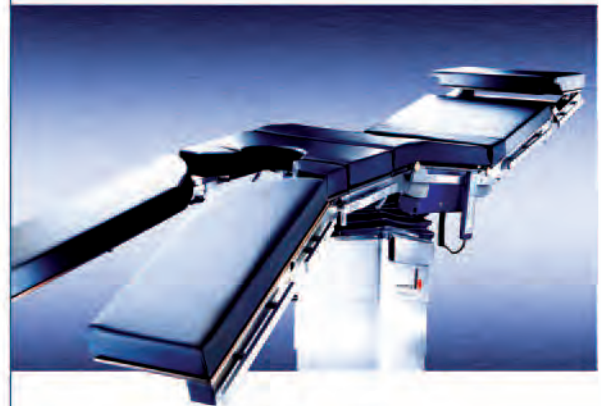
Whilst the public sector is seen as representing a pool of potentials and resources central to the delivery of key public services, the private sector is regarded for its ability to harness its expertise in realising substantial incremental values of those resources. The public sector's potential will not be fully released without the private sector, whose participation can expand opportunities through the following disciplines and skills: Commercial incentives; a focus on customer requirements; new and innovative approaches and better business and management expertise.

PPPs are about more than just privatisation. The prime drivers behind improved efficiency in a privatisation project are freedom to invest, management skills and the profit motive. Using PPPs to bring these forces to bear can offer a sustainable long-term approach to improving social infrastructure, enhancing the value of public sector



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assets and making better use of taxpayers' money, fashioned in a politically acceptable way. There are three main factors that draw a line between our current partnership practices (privatisation) and those of PPP:

- ▶ Adoption of the Public Sector Comparators (PSC) to determine whether PPPs offer good value for

▶ **Scale of project:** Despite the benefits of PPPs, the process involved could be complex and require the input of advisors. As such, the large investment was necessary to absorb additional costs such as legal and financial advisory fees;

▶ **Evaluation process:** This is largely driven by the concept of "value for money," which

- *Safeguarding public interest*

The success of PPPs lies in whether the added value generated benefits users of public services, and the wider community. The government must protect public interest by enforcing a structured tender process to assess the benefits of the private sector's proposed services vis-à-vis the total costs to be borne; delivering better value for money and better management of capital spent; putting effective regulation in place to ensure all public services are accountable to customers and communities that rely on them; and maintaining continuous government involvement in those elements of PPP where a strong public interest remains.

- *Recognising the contribution of staff*

As dedicated and committed staffs are central to the long-term success of partnerships, it is vital that their contribution is recognised and entitlements protected.

- *Developing innovative partnerships*

PPPs are about changing the way in which the government does business and interacts with the private sector, to introduce the private sectors' expansive skills, experience and finance into the wide range of public sector activities for new and innovative solutions.

Conclusions

Having outlined the approaches, we feel that it is opportune to re-examine the way these partnerships have been undertaken, with the principal objective of delivering partnerships that are appropriate, imaginative, holistic and beneficial. A deep appreciation of the mechanisms within PPPs could serve as a starting point for this exercise.

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Despite their proven benefits, the development of PPPs worldwide has been patchy

money to the public sector;

- ▶ The definition - by the public sector - of services to be provided by the private sector and freedom for the private sector to undertake these services, and
- ▶ Optimal allocation of risks between the public and private sector.

Development of PPPs

Despite their proven benefits, the development of PPPs worldwide has been patchy, not least because of poor understanding of how best to engage private sector skills in traditional public sector activities, and political antipathy. However, the UK, some parts of Europe and Japan have embraced the concept and recent trends suggest that these partnerships have borne fruitful results.

In these models, the private sector was responsible for designing, building, operating and maintaining the hospital, while the public took charge of the core medical services such as provision of patient care, recruitment of doctors and nurses, and so on. Apart from considering the stability of the business plan of the private partners and certainty of funding in selecting the private sector partner, the following key factors underlie the success of the partnership:

▶ **Risk allocation:** Risk was allocated to the parties best able to manage it, that is, the government had experience and expertise in providing clinical services and ensuring that the welfare of patients, doctors and nurses was well taken care of, while non-critical services were handled by the private sector. This clear separation of risks enabled the hospital to respond quickly and effectively to patient requirements;

takes into account "whole life cost optimisation." In the long run, the private sector alternative provides better value for money compared with the public sector, as it takes into consideration capital costs as well as maintenance costs. The difference between the public sector comparator measure (that is, what the government would have to pay if it undertook the project itself) and the private sector bid was estimated at 56 million dollars, or a 14.4% reduction in costs

The enhancement of partnerships between the public and private sectors is one of the elements that needs to be addressed in ensuring sustainable economic growth. There are five key principles:

- *Drawing on past experience*

Privatisation has served to define the relationship between the public and private sectors, where it has created thousands of employment opportunities and generated multiplier effects to spur the overall economy. Nonetheless, it is still viewed with suspicion and scepticism. The government needs to identify the reasons for these shortcomings and address the key deficiencies in these programmes.

- *Becoming a better partner*

The lessons learnt need to be applied for the government to become a better partner, so as to secure better public services and value for money for the taxpayer. This can be achieved by the government taking a more long-term view as shareholder, by growing the value of the businesses and drawing on practices in the private sector and in other countries.

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SYSTEM PARTNERSHIPS FOR SUCCESSFUL HOSPITALS

By Heinz Kölking

Hospitals in Europe are under a constant challenge to improve their quality, efficiency and efficacy. This is a significant pre-condition not only for economic success but also for the fulfillment of their contract with society. This demand is compounded by the demographic changes of our national economies and also by medical advancements, ultimately leading to the ability to offer the best and most varied treatment options in medicine and care for everyone – and to do so in a financially viable way. Here too the financial and economic crisis is taking its toll.

Each and every hospital is a complex and highly technical enterprise that needs to have adequate structures and efficient processes in place in order to guarantee a smooth running. This requires a lot of specialised knowledge and manifold resources regarding technology and organisation – things that can be beyond the capacity of an individual hospital. Nonetheless, these things have to be available in a timely and affordable fashion, which is why it is necessary and also practical to concentrate specialised resources and know-how. This is best achieved by bringing together industrial know-how with end-users in the hospital setting, effectively creating system partnerships between industrial partners on one side and the hospital on the other side. The fundamental structural characteristics of such system partnerships can be summarised as follows:

1. Aims

The top priority is to improve the quality of the hospital and healthcare by optimising structures, processes and results. In concrete terms this implies the high availability of resources (manpower, knowledge, technology, organisation) and their cost-efficient coordination. It also includes the possibility of investments and funding within the scope of system partnerships. In addition, fiscal aspects should be taken into account where applicable.

2. Basic Structures

System partnerships need to have a sufficient degree of liability for all partners involved. This can be arranged on a contractual level in form of cooperations. Other institutional options include the establishment and operation of joint enterprises in which both partners hold proportional shares (the hospital will usually hold the majority). This is a further development of

outsourcing, known as insourcing in Germany. It allows these jointly operated businesses to be active on the open market, beyond the maintenance of a hospital. For instance, other hospitals or other market participants can be supplied with services. This increases the economic basis, thereby allowing for the capacity utilisation and subsequently the qualitative and quantitative availability; and, of course, the option of financing investments. Another aspect is the incorporation of these enterprises into the corporate culture of the hospital.

3. Examples

Some examples from our own environment:

► Contractual System Partnerships:

Information technology (hospital information system; PACS); resource / waste disposal; equipment, maintenance and organisation of endoscopy; investment and



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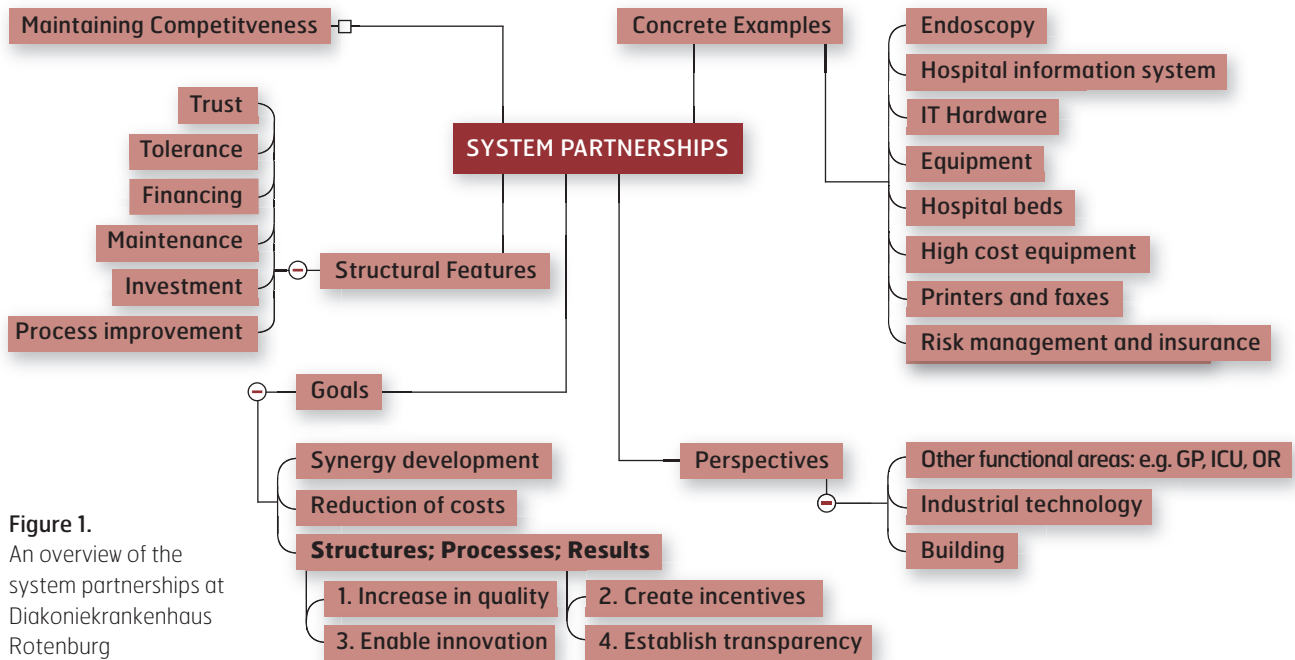


Figure 1.
An overview of the system partnerships at Diakoniekrankenhaus Rotenburg

maintenance IT-hardware; investment and maintenance of hospital beds; maintenance of medical technology; investment and maintenance of communication units; investment and maintenance of communication plants; insurance and risk management.

► **Conjoint, Legally Independent Enterprises:**

Supply of sterile goods; industrial cleaning and bed maintenance; catering; event management; supply of materials; transports and logistics; clerical staff; supply of textiles; personnel recruitment; departmental planning.

The mentioned examples clearly show that these goals can be accomplished. Clear savings were obtained concerning operating costs

(particularly maintenance costs) and also investment costs. Furthermore, the process quality has improved considerably (better processes, lower administrative effort, standardisation) and the quality of the equipment is substantially better. Take equipment management for endoscopy as a specific example; savings of up to 20% as well as significant quality improvement can be reported.

The above mentioned system partnerships between this welfare and social work hospital and associated companies have been practiced with great success for many years. The Diakoniekrankenhaus Rotenburg is a large hospital with approximately 800 beds and 2,000 employees. Each year 30,000 inpatients and 100,000 outpatients are treated. For further information please see the website.

We have come to realise that the requirements of healthcare (higher standard of quality and increasing demand, economic use of high-grade resources) challenge all of us to look for new ways to reach these ambitious goals. The system partnerships between industry and hospitals are a good option, if the correct legal, contractual and organisational preconditions are found, agreed upon and actually implemented. In order for this to work, trust between all parties involved is a must.

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DIAGNOSIS RELATED GROUPS: A SYSTEMS PERSPECTIVE

By Carlos Segovia

Using Diagnosis Related Groups (DRGs) is a way of describing clinical activity based on the resources consumed. DRGs were developed in order to define a fair payment mechanism, so that resources were directed exactly where they were consumed. DRGs would allocate resources amongst providers according to the services provided, thus improving allocative efficiency. However, once DRGs are the foundation to pay for services, they constitute one of the main drivers of clinical behaviour, thus leading to desired but also to unexpected results. This paper will briefly review the description of health systems, the impact of paying by DRGs on them, the additional measures that this form of paying demands, and what could be the future trends related to DRGs.

Health Systems

Health systems are complex systems with different elements interacting to produce a given output. Health systems include the functions of stewardship (or oversight), financing, paying, regulating, organising, and clinical and managerial behaviour, as the mechanisms that can be controlled to achieve their aims. Health systems are expected to offer a certain level of efficiency, access and quality as basic performance measures. More globally, they are maintained in order to protect and improve the health status of populations, to protect from financial risks associated with disease, to respect customer preferences, and to foster equity (table 1).

Paying by DRGs.

Because the different functions of a health system interact, a change in any of them will have an effect on the others. Paying by DRGs will influence clinical behaviour, financing, and

the organisation of services. When paying by DRGs, the service provider's income depends on its patient case-mix, the number of patients and its budget rate. If the provider wants to increase its income, it is supposed to increase productivity. This is the rationale behind the assumption that DRGs may increase technical efficiency of health systems.

Intended and Unintended Effects of DRGs.

All these changes can potentially determine efficiency, access or quality. Behavioural changes associated with the introduction of DRGs as the basis for paying have been described numerous times in literature. In order to increase productivity, a hospital may decrease the length of stay (LOS), which will also decrease waiting lists, to increase the number of patients attended to. The second alternative described so far is to increase the case-mix index (DRGs creeping), which happens either because providers

learn to manage registers more accurately or because they try to artificially increase income. A third alternative is to ration services, providing less services or tests.

The most widely described effect of DRGs has been decreasing LOS, which in turn raises a number of questions about the performance of the system. Shorter LOS always implies some form of reorganisation of tasks within or outside the hospital. The process to reach a diagnosis can be shortened by reorganising services and procedures. Some interventions can be transferred to outpatient services. Both changes may hamper quality of care of inpatients. For instance, patients may be discharged in a more unstable status. More unstable patients at discharge may put higher pressure on community services (elderly residencies, home care, social services), risking quality of care if these are not well equipped and prepared. Early discharges may also offer false low estimates of health-care costs, if costs of outpatient care are not included in calculations. As a consequence, no assumptions about quality of care or efficiency – in terms of societal costs – are warranted when lowering LOS.

A further consequence of decreasing LOS is that if hospitals admit more patients in any given period of time, total expenditures of healthcare will increase, unless some controls are introduced. One way of controlling expenditures that has been experienced is to put a ceiling on the total number of patients to be reimbursed. In such cases a rebound effect has been found, which is coherent with the assumption that hospitals do not aim at increasing produc-

Control knobs	Intermediate performance measures	Performance goals
Stewardship (oversight)	Efficiency Quality Access	Equity Customer satisfaction Health status Financial risk protection
Paying by DRGs - Financing - Organising Regulating		
Behaviour (provision of services)		

Table 1: Functions of a health system. Based on Roberts (2004) and WHO (2000).

Table 2: Potential impact of payment mechanisms. Based on Roberts (2004)

Payment mechanism	Impact on medical decisions and costs
Fee for service	Providers prefer it; increase quantity of services per patient and total supply; quality may decrease due to over-treatment
Per case (as DRGs)	Improves efficiency of hospital services; increases admissions; quality may decrease because too short LOS and under-use of tests
Per diem	Increases LOS; less inflationary than fee for service
Capitation	Reduces unnecessary services; improves efficiency; patients may be Under-treated; risk selection by providers
Global budget	Improves efficiency; most effective to control inflationary costs; quality may decrease;
Salary	No incentive to over-treat patients; quantity of output per hour may decrease; quality may decrease; self-referral to their private practice

tivity by itself, but rather try to increase their total income. Another way of controlling and stabilising health expenditures would be to close or downsize less productive facilities. However, geographical access and equity could be at stake in this case.

Lessons Learned

Some lessons can be learned from the experience so far with DRGs. It is clear that if you want a relevant effect on productivity, which is the rationale behind advocating for DRGs, you need an equally powerful quality control programme, to prevent adverse outcomes related to shorter LOS or rationing of appropriate services. Furthermore, it is not enough to assess how paying changes hospital costs. Total costs from the societal point of view should be calculated, and access and equity should be verified.

The interrelationship between the different functions of health systems is frequently overlooked. The interaction and coherence of different functions of the system and the outcomes of this interaction in terms of access, equity and quality should never be assumed. Assuming that healthcare providers will attend more patients if paid for it with no impact on quality or access may seem coherent with a simplistic interpretation of microeconomic theory, but it is naive. Interventions to improve the performance of health systems are never so simple, and never based on a single mechanism. Health systems need a sound and powerful information system to conduct appropriate evaluations based only on empirical data and not on assumptions.

All payment mechanisms need empirical evaluation, payment mechanisms based on DRGs are no different. Every payment scheme has drawbacks and potential unintended effects. Table 2 summarises what is known.

Overall Effects and Future Trends

The experience of paying by DRGs as well as many other experiences on quality of care and healthcare management show the importance of taking into account the interrelations of different functions of the health systems, rather than conceptualising them one by one. Paying hospitals by DRGs show specifically that verifying the impact on other parts of the health system, such as primary care or long-term care, and even on the social system, is important. Therefore explicit plans to improve the coordination amongst these different care providers are needed. We also need much more powerful management tools for quality management of clinical procedures. Healthcare systems need more empirical evidence of their performance. Interestingly, DRGs can contribute to this if based on clinically relevant information.

Conclusions

Paying by DRGs may have intended and unintended effects, depending on the coherence of other functions of the health system – such as other types of incentives, the organisation of quality programmes and the information systems – with the desired objective.

Decisions on the elements of health systems – paying, organising, regulating, behaviour – should be based on empirical data and not on simplistic assumptions. Quality, efficiency and access should be verified whenever a change is introduced in the health system.

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EuroDRG – Diagnosis-Related Groups in Europe: Towards Efficiency and Quality

EuroDRG is a project funded under the 7th EU Framework Programme. It runs from January 2009—December 2011 with 12 participants from 10 European countries: England, Sweden, France, Spain, The Netherlands, Austria, Poland, Estonia, Finland and Germany.

It is believed that the “Europeanisation” of healthcare is the greatest challenge national health systems are facing. Increased patient mobility will place growing pressure on the different, and often incompatible, DRG systems used by the various EU Member States. Any modifications to national DRG systems should thus be made with an eye towards the EU as a whole. Indeed, calls for a Europe-wide system of DRGs are now commonplace. That is where EuroDRG comes in- its goal is to address this problem by analysing health systems in the ten different countries.

Phase one focuses on the determinants of hospital costs and DRG-based payments in the inpatient sector. Phase two seeks to develop and implement the first Europe-wide hospital benchmarking system as a means of identifying common issues and systemic factors.

For more information, please visit:
www.eurodrgeu

A GLIMPSE OF HEALTHCARE'S SUSTAINABLE FUTURE

By Paul Whaley

Sustainability concepts are taking root in healthcare, the subject of more and more discussion as the spectre of climate change looms larger. The pressure to reduce environmental impact is being felt all the way through healthcare operations, in purchasing, waste management, water and energy use, energy generation, transport, food service and building design. It may not be long before everyone in the healthcare profession will need to understand what these concepts are and how they apply to the hospital environment.

So What Does Sustainable Healthcare Look Like?

Though there is much interest and work on sustainability in projects all over Europe, hospitals have yet to embrace environmental principles in quite the way as that envisaged at New Karolinska Solna (NKS), a new hospital due to open in 2015 in the heart of Stockholm, Sweden.

In 2001, an investigative committee determined that patching up the old Karolinska University Hospital site at Solna, with its disjointed, aging structures, was neither economically nor physically compatible with the intention of Stockholm Regional Council (SLL) to provide better care to patients in a better structured hospital.

"The current Solna site is comprised of around 50 buildings and is spread out, so it is hard to have modern healthcare in them," explains Anders Göransson, Environment Coordinator for NKS.

Instead, the committee laid the foundations for a departure from the conventional concept of the modern univer-

sity hospital, envisaging a new facility which would:

- ▶ Hold 800 beds, all private rooms with en-suite bathrooms (excluding day-patient beds);
- ▶ Anticipate 1600-1800 patient visits per day of which 10-20% will be emergency cases, and
- ▶ Cost 1.3 billion EUR [2007 valuation] and be the size of the Wembley Stadium in the UK.

Being built to supercede the already environmentally-committed Karolinska University Hospital, sustainability is a top priority from the outset for this huge new development. The concept runs through the work environment for staff and employees, the patient environment for optimised care and the public environment for just about anybody in or near the hospital.

The plans encompass environmentally-friendly building techniques, materials and alternative energy sources; from a literal "greening" with grass and trees, of the asphalt boundary between the new site and

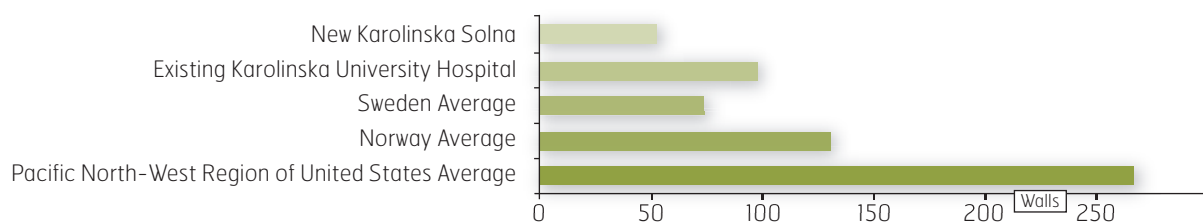
the Karolinska Institute, to NKS being designed to run on less than half of the existing hospital's energy requirements. Most ambitious of all is the ultimate aim of zero carbon dioxide emissions.

"We really want it to be outstanding compared to international standards - to be a big landmark. The energy goal is very low and still in the planning phase - getting that would be really good," says Göransson.

All the materials to be used in construction and during the hospital's operational life-cycle will be resource-efficient. This goes for everything from the concrete in the foundations to the walls, floors, ceilings to the lighting fixtures, bulbs and switches. Regardless of the actual systems employed, the ultimate requirement is that all energy purchased by the hospital will come from a renewable source. Even the backup power generators are held to this requirement.

"Since we have only just entered the tender evaluation phase we haven't yet decided the ways in which we are going to

Figure 1. Energy Use in Hospitals by Country EUI (KBtu/SF/year)



Source: American Society of Healthcare Engineering (2009)

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meet the goal of zero emissions, but boreholes and heat pumps for cooling and heating and buying renewable energy are obvious ways in which this could be done," says Göransson.

"It is harder to cool than heat the hospital, especially in the spring and summer, because medical equipment and people generate a lot of warmth. The arrangement of facades and use of glass can make a huge difference to heating and cooling costs." NKS will also utilise district heating powered by a biomass plant and waste incinerator – although incineration is not necessarily favoured by environmental groups. District cooling is also supplied by water from the sea, which is fed to the hospital, meaning less electricity needs to be used on cooling equipment.

To ensure a favourable indoor environment, suppliers are being asked to provide a material inventory checked-off against the environmentally sustainable guidelines used throughout the building. A life-cycle approach is critical to the material assessments, with pitfalls from production all the way through to recycling being assessed.

"We are looking at all the materials, paint and everything, to avoid all the harmful chemicals. 30-40,000 products are being bought – it is hard work to check all of those for harmful substances," says Göransson.

The existing Karolinska site solves the problem of day-to-day operational use of potentially harmful chemicals with a database called KLARA. KLARA allows the environment management team to keep track of how much of each chemical is being bought by each department, making it easy to measure their success in phasing out chemicals prioritised for substitution with less toxic alternatives.

Another database system for construction materials is in use at NKS, which pulls in information from suppliers and allows NKS to evaluate whether or not the materials meet the sustainability standards set by the hospital.

"Of course, the producers don't like to give the information, but by using the same criteria for all building projects across Sweden, the purchase volume is high enough to be able to make these demands," says Göransson.

Practices at NKS will also take into account SLL's research over the last years into the environmental effects of pharmaceuticals.

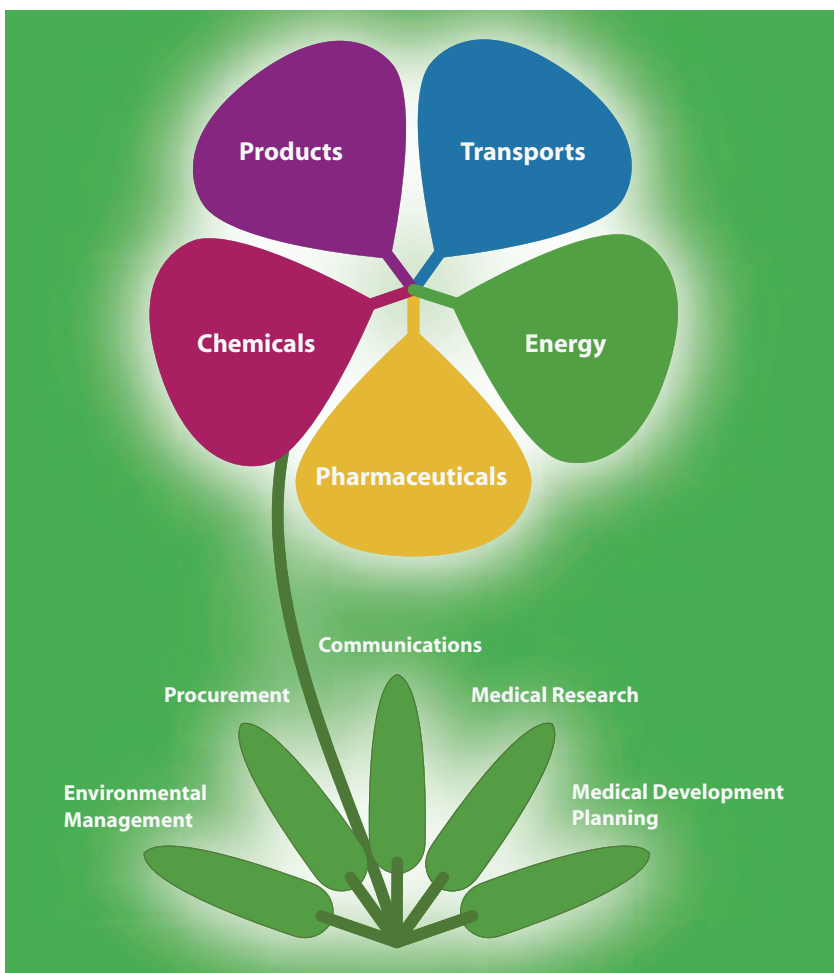


Figure 2. SLL's environmental programme

SLL now has a near-complete set of persistence, biocumulation and toxicity (PBT) profiles for the active compounds in prescription drugs. This information allows doctors to prescribe, when other factors are equal, the least environmentally-harmful drug appropriate for the treatment of a given condition.

Additionally, NKS will continue with purification of nitrous oxide, which is estimated to be 300 times more potent than carbon dioxide as a greenhouse gas. Karolinska University Hospital in Huddinge was the first worldwide to introduce the recapture of nitrous oxide.

To verify its environmental achievements, NKS will be designed to meet three main environmental certifications: the international environmental management standard ISO 14001, the US LEED standard and the EU GreenBuilding Programme standard. NKS will be among a short list of hos-

pitals that will have made an effort to earn any of these and be likely unique in achieving all three.

How New Karolinska Solna's Environmental Objectives are Defined by Stockholm Regional Council's Own Ambitious Sustainability Goals

It is no accident that one of the world's most ambitious healthcare projects is sited in Stockholm, whose Regional Council (SLL) has a leading position in the sustainability revolution in economy and society.

Symbolised by a five-petaled, five-leaved flower, SLL's environmental programme is in its fifth phase (see fig.2). Each petal represents a component of SLL's vision of a sustainable society. There is a petal each for transport, energy, pharmaceuticals, chemicals and products. Some

Energy efficiency as competitive advantage

The modern day healthcare environment demands that hospitals are more than just hospitals. In addition to offering the best possible patient care, it is also necessary to use energy in a sustainable and environmentally responsible way to reduce costs and at the same time guarantee the highest level of security and reliability. Modern building technology can prove to be a true competitive advantage in this regard and can lead to energy savings of over 25 percent.

The healthcare sector is today faced with significant challenges. The medical offering and patient care options are constantly being improved and new technologies are being introduced on an ongoing basis. However, the consequences of the associated cost explosion is increasingly burdening both public and private investors and is having a negative impact on health insurance premiums. Increasing life expectancy and the rise in the amount of chronic illnesses are not making the situation any easier.

The growth in privatization or private financing of hospitals also serves to increase competition. The fight for solvent private patients is already underway. These patients rightly expect from a clinic high quality medical care but are also placing increasing value on comfort and environmental awareness. The expectation is that hospitals must now excel in sustainability and energy efficiency.

Those responsible for building technology in hospitals are thus faced with having to prove themselves in what is an increasingly competitive environment.

Hospitals use a lot of energy

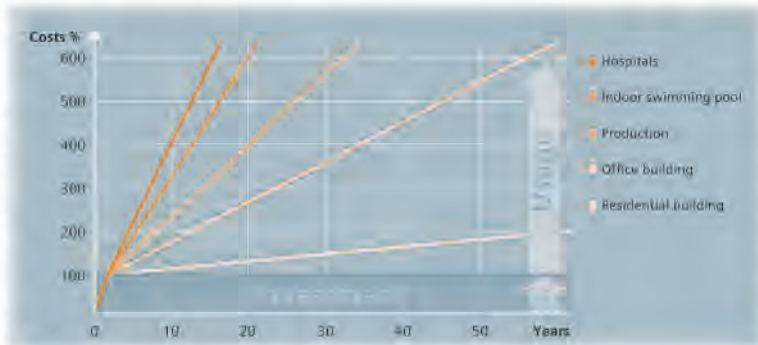
Hospital buildings are amongst the highest in terms of energy consumption. Since they are in operation 24 hours a day, 365 days a year, they have a constantly high demand for electricity and heating and require a lot of energy for water heating, ventilation, air-conditioning and, in some cases, also steam.

Fossil fuels are predominantly used for heating and for the provision of hot water, whilst electrical energy is used for lighting and ventilation. The two areas combined are responsible for approximately 75 percent of a hospital's total energy costs. Hospitals in Germany consume on average approx. 300 kW thermal and over 100 kW electrical energy per square meter, per hour.

Key factor building technology

This situation leads to two fundamental requirements that clinics must now fulfill:

- Constant cost pressure forces ongoing streamlining of operations whilst at the same time being faced with increasing requirements.
- Hospitals must use energy in a sustainable way and combine energy efficiency with comfort and safe energy supply.



Hospitals are among the most complex of buildings, with operational costs much higher than those of an office building.

Building technology is a key to success, as modern building automation systems ensure comfort and hygiene and allow economical operation and high energy efficiency. Thus, cutting-edge building and security technology is a vital cornerstone for the running of an efficient hospital.

In order to continue to meet increasing requirements with regards to environmental responsibility, energy supply, security and profitability, the systems have to be increasingly integrated in a building. By networking all systems in the technological infrastructure, as provided by Siemens with its Total Building Solutions (TBS), the highest level of comfort, optimal safety, security and maximum energy efficiency is ensured. Only when all building technology systems work perfectly together, from heating, ventilation and air-conditioning, access control, CCTV, intrusion and fire detection to alarm and evacuation systems, can the systems show their full potential.

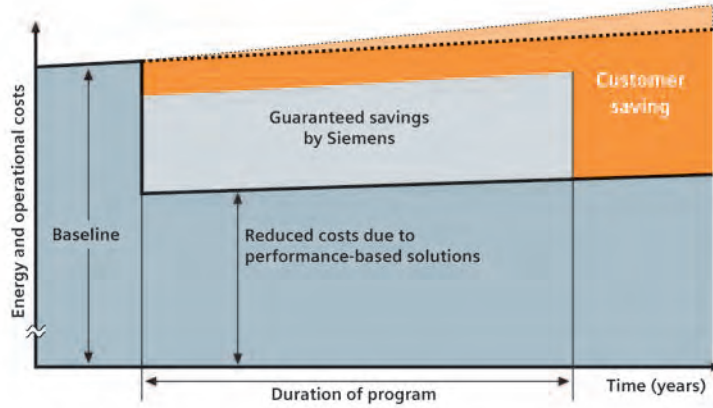
However, many hospitals have old systems in need of renovation. Thus considerable saving potentials are left untapped. Practical examples show that savings of 25 to 40 percent can be achieved by implementing the appropriate renovation measures.

Savings of over 25 percent

The Klinikum Bremerhaven Reinkenheide in Germany is a showpiece for energy efficiency in a hospital. The hospital was opened in 1976, and with its 680 beds has managed to position itself as a leading therapy and diagnostic center. However, over the years the building technology systems' performance and efficiency have increasingly deteriorated, especially with regard to energy consumption. In 2004 alone, approx. two million Euros were spent on primary energy.

All building technology facilities, including the heating infrastructure, cooling system, medical compressed air system and steam sterilization system, were renewed using around 120 measures implemented through a new building

automation system with a management system and energy optimization systems.



In the long term, Energy-Saving Performance Contracting with Siemens pays off

within twelve years. Such cost savings can be used to fund the purchase of modern hospital infrastructure, thereby increasing competitiveness.

These measures meant that energy consumption could be reduced by more than 25 percent. The Klinikum Reinkenheide has saved 520,000 Euros in energy costs and has reduced CO2 emissions by 4,130 tonnes per year since the renovation. With these savings, the investment in the framework of Energy Saving Performance Contracting with Siemens will have paid for itself



The Klinikum Bremerhaven Reinkenheide reduced its CO2 emissions by 4,130 tonnes a year.

More information: Roberto Fumagalli, Head of Vertical Market Healthcare Siemens - Building Technologies Division



Picture 1. The corner of main building

of the goals SLL has set itself for the end of phase five in 2011 include:

- ▶ At least half of the County Council's passenger and goods transports operating on renewable fuel;
- ▶ All electricity and cooling to come from green energy sources and at least 75% of heating to be derived from renewable sources;
- ▶ The levels of the most eco-toxic pharmaceuticals in discharge from wastewater treatment plants or in surface water to be lower than in 2005;
- ▶ 25% of the chemicals and chemical products which SLL identifies as having a serious effect on health and the environment to have been phased out, and
- ▶ 25% of the County Council's meals to be based on sustainably-produced products.

Cutting Carbon: How a UK Trust Showed That an Environmental Vision Isn't Just for Swedes

On May 11 2009, Norfolk and Waveney Mental Health Partnership NHS Trust opened Justin Gardner House, a psychiatric intensive care and low secure unit acknowledged as one of the best mental health facilities in the UK.

Designed as a statement building which would beat NHS energy targets, the unit exemplifies many of the low-carbon principles which will be on display at New Karolinska Solna, including rainwater harvesting, ground source heat pumps, grid-connected photovoltaic arrays, natural light and

ventilation, and high levels of insulation.

The commitment to a minimal carbon footprint means approximately 70% of the building's heating is free, while its use of renewable energy should save 49 tonnes of carbon per year. But how, in a cash-strapped NHS, did the facilities team convince the Trust to invest in the project?

Corporate consciousness and the support of the Financial Director are often cited as key for a hospital having strong environmental performance. Norfolk and Waveney is no different: The former Chief Executive, who recently retired, and her incoming replacement both have a strong commitment to the environment.

"This gives us the confidence to propose environmental components to projects. In general, if there is a corporate consciousness of environmental issues, the Board and the Chief Executive will follow that sensibility," says Jonathan Stewart, Strategic Estates Manager for the Trust. *"At the end of the day, if your organisation says 'yes' then you can press ahead, but if it says 'no' then progress will be impossible."*

The Financial Director is a particularly important figure, because it is generally the case that exceeding the norm on environmental performance means spending more money.

"This is beginning to be seen as a short-sighted view, as capital costs look increasingly irrelevant next to true life-cycle costs," says Stewart.

Stewart also advises that cost/benefit calculations should not be approached too straightforwardly. Photovoltaic arrays, for ex-

ample, take a very long time to pay for themselves and on a pure capital payback analysis would appear much less attractive than the true environmental benefits they provide.

However, the installation of photovoltaics can be supported by capital funding, which is still generally more available than revenue funding in the ever tightening budgets of the NHS. So if capital funding can be used in such a way as to reduce pressure on revenue funding it makes sense to do that – even if the capital spend is not fully recouped in the short term.

Investing in this way in renewable energy in the form of ground source heat pumps and photovoltaic cells means the mental health unit has an energy bill of only 900 GBP [1100 EUR] per year – about the same as a suburban house, which allows scarce revenue funds to be invested in ways which more directly benefit patients.

The support of the Executive, Board and Financial Director have reaped dividends for the Trust. Stewart is regularly invited to conferences to present on the project as a leading example of sustainable healthcare design, even if he is personally modest about their achievements. The fact that the project acts as a beacon for the Trust is also important for distinguishing itself from its competitors in an increasingly business-minded NHS.

Lessons

- ▶ If there is no corporate consciousness of environmental issues, then address this before integrating environment considerations into a project – otherwise, the environmental aspects will just get thrown out.
- ▶ Approach cost/benefit calculations carefully: It's not just about quantities of money, it's also about what you spend the money on and how readily available money is for those purposes.
- ▶ Don't forget that strong environmental performance goes hand-in-hand with a hospital's duty of care: Good environmental performance tends to create a better work and healing environment.

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MANAGING CLINICAL COMMUNICATION FOR PATIENT SAFETY: **THE PACT PROJECT**

By Sally Squire, Eileen Petrie, Eileen Clark and MaryEllen Mickle

The clinical handover process is an integral component of patient care. Communication between clinicians regarding a patient's condition, treatment plan and care is directly related to the quality of health outcomes and system success. Poor communication has been implicated as the leading cause of medication errors, delays in treatment, perinatal deaths and injuries, patient falls and wrong site surgeries. A study by the Joint Commission on Accreditation of Healthcare Organisations in the United States found that communication errors were the root cause of almost 70% of all sentinel events, with 75% of patients involved dying.

Effective communication is a complex concept requiring skill, insight, cognition and understanding. Although used frequently in day-to-day care, it remains a skill that must be learned, practiced and refined by all clinicians. Healthcare providers need to learn how to communicate in a clear, concise and appropriate manner within hurried, noisy and frantic healthcare environments.

Variations and inconsistencies in handover practices together with an apparent lack of best practice guidelines contribute to increased risk for patients and interruptions to the continuum of care. With this in mind, the PACT project was designed to develop, implement and evaluate for improvements in clinical communication.

The Setting

The project took place during 2008 in a regional, private hospital in south-eastern Australia. The 103 bed hospital provides acute inpatient and outpatient medical, surgical and mental health services to a predominantly rural catchment area within a radius of 150 km.

There were particular challenges in this setting:

- ▶ No resident medical officers on site;
- ▶ Nurses have to communicate directly with specialists;
- ▶ Poor mobile telephone coverage, and
- ▶ High proportion of part time, on call and junior nursing staff.

The PACT Project

The key objective of this project was to improve communication and increase patient

safety by the development, implementation and evaluation of formalised tools and education processes for clinical handover. This initiative was entitled 'The PACT Project', to convey the essential elements of effective clinical handover.

P – Patient assessment. Nurses must have the skills to conduct an effective patient assessment, particularly for patients whose condition is deteriorating.

A – Assertive communication. Assessment findings must be communicated clearly and completely to other clinicians to ensure patient safety

C – Continuum of care. Patient safety must be maintained by the timely, accurate and complete transfer of responsibility for patient care from nurse to nurse and shift to shift.

T – Teamwork with trust. All healthcare providers regardless of their position and experience have the right to speak up and express their concerns or opinions about a patient in a trusting and respectful team environment.

A project team (the authors) was established to guide the development, implementation and evaluation phases of the initiative. A critical reference group (PACT champions) of 7 experienced nurses from the wards met regularly with the project team. They promoted the project to ward staff and reported views and opinions of nurses on the floor back to the team.

The project team kept staff informed of progress through monthly PACT newsletters,

posters and notice boards located in wards and the staff dining room. All project materials were coloured bright pink to provide a visual reminder of the PACT message.

Baseline Data

Questionnaires were designed by the project team to determine opinions of nurses and specialist doctors about the effectiveness of clinical handover and information exchange between nurses and other healthcare providers. In total, 49 nurses (response rate 54%) and 16 specialists (response rate 73%) responded. The results supported the belief that improvements in clinical handover were needed at the hospital. Key figures were:

- ▶ 94% identified that different nurses give handover in different ways;
- ▶ 82% stated that a standardised way of giving handover was needed;
- ▶ 85% believed that improvement was needed in the way nurses communicate with each other;
- ▶ 86% agreed that improvement was needed in the way that nurses communicate with specialists, and
- ▶ 60% wanted to deliver handover more effectively.

Implementation

All nursing staff attended one-hour workshops on assertive communication and patient assessment, primarily focussed upon early recognition of the deteriorating patient. Workshops were mandatory and staff were paid to attend. Presentations were interactive and covered both theory and the

AIBURY WODONGA PRIVATE HOSPITAL

SBAR COMMUNICATION TOOL

Unit Record No: _____
Surname: _____
Given Names: _____
D.O.B: ____/____/____ Sex: _____
Affix patient label

S Situation
Time and Date: _____
Problem: _____
State severity: Severe Very concerned Concerned Controlled
Name of professional being contacted: _____
Number called / contact reached (eg mobile / pager): _____
Number and time of attempts made to reach person being called: _____

B Background
Information could include:
Admitting diagnosis / operation: _____
Date of admission: _____
Most recent vital signs @ _____ hrs BP _____ HR _____ Temp _____
Pain Score _____ RR _____ S.O₂ _____ Urine output _____
Pt on oxygen? Yes No No Litres / min _____ IV Fluid _____
Test Results _____
Pt mental state _____
Assessment of skin / extremities _____

A Assessment
Your assessment should be concise, clear, assertive and factual

R Recommendations
I suggest / request that: _____
Does Dr want a response notified about? Yes No to be _____
Doctor's Orders / comments: _____

Examples of recommendations may include:
• Pt needs to be seen now
• Order change
• Transfer to alternate facility
• Request for tests needed
• Talk to the patient and/or family

Outcome: _____

Print Name: _____ Signature: _____ Designation: _____

SBAR COMMUNICATION TOOL MR 126

Figure 1. Standardised communication tools.

lived experiences of staff, highlighting from their own practice examples of good and poor communications.

Two communication tools developed by the project team became the cornerstones of the project. The first was a handover prompt card which provided a template for standardising shift to shift handover. The prompt card was designed to provide a structured, standardised format for handover by establishing a sequence for information transfer, making it easier for staff to identify if information was omitted. The bright pink handover prompt cards attached to staff identity badges, ensuring they were always available.

The second tool was a communication template or script, to be followed when nurses contacted specialists by telephone about

deteriorating patients who required review. This template used a hybrid of the bullet point communication style favored by doctors and the descriptive narrative preferred by nurses. The format helped nurses to structure their communication to facilitate listening and comprehension. It prompted staff to assess the patient, gather pertinent information and be prepared for questions the doctor may ask. There is space to record doctor's orders and any follow up required. Once completed, this form becomes part of the medical record.

Outcomes

For staff

The tools were evaluated using action research (four completed cycles) and amend-

ed as a result of staff feedback and evaluation. Staff identified the value of the tools for ensuring accurate, consistent handovers and keeping staff on task when delivering handover, especially if they were tired at the end of a long shift.

A post implementation survey of nurses showed that:

- ▶ 68% stated that they now always get the information they need at handover;
- ▶ 72% agreed that handover is more structured now than before the project;
- ▶ 68% of nurses believed shift to shift handover has improved, and
- ▶ 80% felt more confident when communicating with doctors.

In a focus group conducted by the external project team members (EP & EC) PACT champions identified the following benefits:

- ▶ Handovers more comprehensive and omissions easily identified;
- ▶ Increased confidence among junior staff, recent graduates and students;
- ▶ Assessment workshops and communication tools led to earlier intervention for deteriorating patients;
- ▶ Improved written documentation;
- ▶ Less stress for staff in giving handover and when contacting doctors, and
- ▶ Nurses now able to identify and act on emerging clinical trends.

Anecdotal evidence supports these findings. Nursing Unit Managers and nurses identified improvements in the quality and structure of handovers given by staff. Handovers were generally more comprehensive and detailed, and structured to include information relevant to each patient. Nurses reported their confidence had increased when giving handover and they strongly supported the use of the template when telephoning doctors about deteriorating patients. Although the template could not remove all anxiety when calling a doctor at 3 am, staff felt more comfortable with a format to follow which kept them focussed and prepared.

For patient safety

There have been a number of patient care benefits from the project. Analysis of the communication templates used by nurses when calling doctors allowed the identifi-

cation of emerging clinical trends. To date the major reasons for calls include:

- ▶ Uncontrolled nausea and vomiting;
- ▶ Uncontrolled pain, and
- ▶ Observations outside normal limits.

One outcome has been the introduction of an antiemetic protocol. Since its implementation there have been no telephone calls to doctors regarding uncontrolled nausea and vomiting. Staff identify and respond to deteriorating patients much sooner than previously, leading to more timely care and interventions. Collection of statistical data including Medical Emergency Team (MET) calls and transfers to the high dependency unit is continuing, to evaluate the long term impact of the PACT project.

Conclusions

A key focus for hospital managers today is to ensure optimal treatment, patient safety and early identification of issues that might lead to delays in discharge. Timely discharge and high patient satisfaction are especially important in the private (for profit) sector. The PACT project has shown one way to achieve these outcomes.

Another key issue is recruitment and retention of nurses, with stress cited as a major cause of staff morbidity, absenteeism and departure. The PACT project has shown one way to reduce stress among nurses by increasing their skills and confidence.

Future initiatives for this project include expanding and adapting the tools to the specialty areas of the hospital including Post Anesthetic Care Unit, Oncology and Mental Health Units. There are also plans to extend the use of the PACT project to other hospitals across Australia.

The ongoing challenge for the project is to maintain staff enthusiasm for and compliance with the structured programme. This can be achieved through embedding it in hospital policy, including it in orientation programmes for new staff and having mandatory annual updates for all staff.

Acknowledgements

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TELEMATIC AND BIOMEDICAL SERVICES

PORTABLE ULTRASOUND ON THE RISE

Trend Shows Technological Advances Fuelling Growth

By Diane Wilkinson

The ultrasound imaging equipment market is currently seeing a clear trend towards miniaturisation. The dramatic increase in the use of hand-held and portable ultrasound (defined by InMedica as compact ultrasound), has driven additional growth for ultrasound in markets such as cardiology.

Developments in the ultrasound imaging market today focus on improvements in diagnostic performance and workflow enhancements. The trend to portability further aids improvements in point-of-care services and ultimately, patient care. With the ultimate goal of increasing the efficiency and productivity by which hospitals and clinics operate, these enhancements are necessary to ensure increased patient volume and throughput, and consequently, the survival of many hospitals and clinics globally. This holds particular relevance in the current environment where the cost of healthcare is vastly out-pacing government spending and reimbursement.

Cardiologists Increase Use of Portable Ultrasound

The trend to miniaturisation is affecting the use of ultrasound by cardiologists. A re-

cent survey by InMedica on the use of ultrasound in western European hospitals and imaging centres has highlighted that cardiologists expect to be using much more mobile ultrasound in the near future, with emerging applications for ultrasound in cardiology including emergency room, critical care and bedside exams.

Cardiologists from across Europe were recruited in this research, to help equipment manufacturers improve their product development and overall service to customers. Working in partnership with a number of leading equipment manufacturers, InMedica designed a questionnaire to gather direct feedback from cardiologists on the equipment they are using, the examinations they are performing, ways in which their systems could be improved and how their work is changing. The results of the survey are presented by InMedica in the report, "European Customer Insights – Ultrasound in Cardiology".

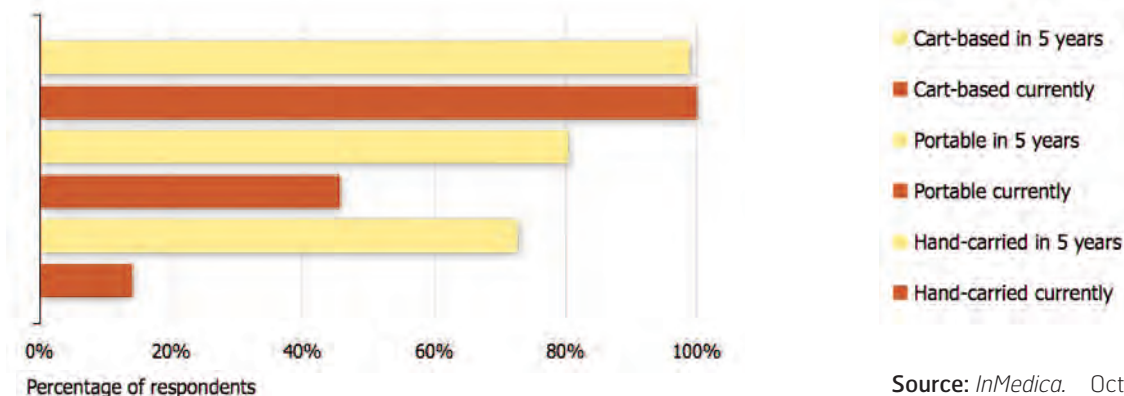
Survey Results

Table 1 presents the types of ultrasound systems being used by the surveyed cardiologists. While 100% of respondents were using cart-based ultrasound in cardiology, InMedica found that 46% of respondents were also using a portable ultrasound system to complement their traditional cart-based system. Furthermore, 73% of respondents expected to be using hand-held ultrasound within the next five years.

For future use of hand-carried and portable ultrasound systems in cardiology, 85% of respondents answered that their role would be complementary to cart-based systems. Moreover, 6% thought cart-based systems would be fully replaced by hand-carried and portable systems. Only 9% of respondents thought that hand-carried systems played no future role for the use of ultrasound in cardiology.

Table 1. What types of ultrasound systems are being used by cardiologists?

Data presented is a cumulative total for system usage forecast.



Source: InMedica. Oct-08

Workflow Benefits

In relation to workflow, the greatest numbers of responses (25% of cardiologists) were in relation to the positive use of hand-carried and portable systems in emergency, critically

ill and bedside examinations. Conversely however, 19% of respondents considered that these systems would have little or no impact on workflow in relation to cardiology.

The survey also showed that cardiologists expect their work to become more

mobile in future, with bedside examinations becoming common practice. Out-patient examinations were also expected to increase in regularity. By taking ultrasound to the patient, a reduction in waiting times can be achieved as all scans will not have to be referred to over-stretched imaging departments.

Quality of Care to Rise

Screening and minor scans can also be performed using portable equipment, often by non-imaging specialists, only referring patients to the imaging departments for in-depth scans for serious conditions. The increased use of ultrasound, particularly in new applications, will raise the overall quality of care.

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“73% of cardiologists expect to be using hand-carried ultrasound within five years.”

ill and bedside examinations. 21% of respondents considered these systems to have a “strongly positive” impact in cardiology, relating to the increased use and importance of hand-carried and portable systems in ad-

mobile in future, with bedside examinations becoming common practice. Out-patient examinations were also expected to increase in regularity. By taking ultrasound to the patient, a reduction in wait-



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HEALTHCARE IN THE NETHERLANDS

According to the annual Euro Health Consumer Index, the Netherlands has the best healthcare system in Europe. It topped the European survey for the second year running scoring highly in waiting times for patients, e-health and access to medication. Many also believe that system in the Netherlands is a good model for healthcare in the U.S. This article provides a brief overview of the system supposedly the best in Europe.

Like most healthcare systems in Europe, the Dutch Healthcare System can be described as a system in transition. The most significant reform is undoubtedly the new healthcare cost system implemented on 1st January 2006.

Created by the Ministry of Health, Welfare and Sport, the new health insurance system for health costs is about enforcing the following principles: Durability, solidarity, choice, quality and efficiency. The aim is putting the patient centre stage by creating a balance between a solid social basis and market dynamics.

Some Background

In the Netherlands, it is compulsory for each citizen to be insured. The government does not participate directly in the actual provision of care- this is the task of private care suppliers.

Before 2006, the system was outdated with major flaws:

- ▶ Too many schemes- social insurance, private insurance and civil servants;
- ▶ No choice;

- ▶ Few competition incentives for insurers;
- ▶ Little pressure on suppliers to achieve better performance, and
- ▶ Unfair premium and income effects.

The Reform Act

Key elements of new Act:

- ▶ New standard of insurance for all;
- ▶ Citizens can change insurer every year;
- ▶ Insurers compete for the business of the insured;
- ▶ Customers and insurers stimulate suppliers to provide better quality, and
- ▶ Compensation for people on low incomes.

The Dutch Government no longer arranges everything in the healthcare system but remains in charge of accessibility, affordability and quality of healthcare. Parties in the market have greater freedom and greater responsibility to compete for the business of the insured and citizens have more responsibility but more influence and choices in terms of insurance.

The Insurers

Healthcare insurers must offer health insurance to everyone, irrespective of per-

sonal characteristics and social situation. Everyone is subject to the same conditions and insurers must offer their basic package to all regardless of risks and "expensive customers". Moreover, insurers have a strong position regarding care providers; they negotiate with care providers on price, content and organisation of care.

Care Providers

For care providers the reform act is about delivering better performance. Previously it was the care providers who had the dominant position- they determined what care was provided and its quality. There was little incentive to improve and measure performance. This has changed with insurers pushing for higher standards (quality and cost). There are now performance-oriented costing systems and benchmarking initiatives. These measurements offer care providers opportunities to distinguish their hospitals/facilities from those around them and also customise their services.

Care Allowance

"Care Affordable By All" this the message of the new Act- that care is available and affordable for all, including those on low

incomes and those with high care costs. Insurers accept all people to prevent discrimination on the basis of risk.

For those people who cannot afford to pay the fixed insurance premium they can apply for a care allowance paid for by the Inland Revenue Service. Around five million people benefit from this allowance. As a safety net for insurers, as well as fixed contributions, insured parties also pay income related contributions which are used to offset risks of expensive customers.

Results

The short term results of the reform act are a single legal framework, more choices for customers, more competition and guaranteed affordability. In the long term it is hoped these changes will provide a better quality of care, greater cost-consciousness and a tailor-made care through the greater influence by customers.

The Organisation of Care

Public health services, primary care and secondary care are three separate entities in the Netherlands, each playing a distinct role. Public health services are provided through local offices all over the country. Primary care is provided by family physicians and secondary and tertiary care in hospitals.

Public Health

There is a regional network of public health services. Municipal services include child health examination, vaccinations, environmental health, health protection and promotion. Local services include infectious disease control, general hygiene, school health and health education.

Primary Healthcare

This is provided mostly by family physicians—the family physician is the gatekeeper of the primary healthcare system. Patients need referral for hospital and specialised treatments. Evidence of the success of this “gatekeeper” system lies in low referral rates. Low prescription rates are also noted.

Secondary and Tertiary Care

Secondary care is provided by medical specialists in hospitals. Specialists who

provide both inpatient and outpatient care are not employed by the hospitals but are self-employed working on a contractual basis. There is a strict referral policy, patients can only go directly to the hospital in an emergency situation.

Transmural care

This is a term used to refer to care given across the walls of the system. Transmural care also plays an important role by bridging the gap between outpatient and inpatient care. This includes the use of home care technology, specialised nurses and guidelines. It is particularly useful for chronic patients.

Hospital Management

Hospital management has been streamlined with middle management becoming responsible for departmental functions. Medical specialists are integrated into administrative structure. Administrators with broader roles have also replaced

directors of Nursing. Hospitals are organised according to two principles: Decentralisation and medical specialists’ participation in management.

With decentralised organisation, authority and responsibility are transferred to the operational units. This shifts responsibility and accountability to specialists in clinical departments and creates more flexibility. This form of organisation is said to be most effective when clinical specialists participate in management with their own budgets.

Sources:

- ▶ Euro Health Consumer Index 2009 Report
- ▶ The New Care System in the Netherlands, Ministry of Health, Welfare and Sport, 2006
- ▶ Healthcare Systems in Transition, European Observatory on Health Systems and Policies, 2004

FACTS AND FIGURES		Date
Population (millions)	16.38	2006
Life expectancy at birth (years)	78 (male) and 82 (female)	2006
Healthy life expectancy at birth (years)	70 (male) and 73 (female)	2003
Probability of dying under 5 (per 1,000 live births)	5	2006
Probability of dying between 15 and 60 years (per 1000 population)	81 (male) and 59 (female)	2006
Gross national income per capita (PPP International USD)	37,940	2006
Total healthcare expenditure per capita (PPP USD)	3,383	2006
Total healthcare expenditure (% GDP)	9.3%	2006
Number of physicians	60,519	2005
Number of nursing and midwifery personnel	239,172	2006
Physician density (per 10,000 inhabitants)	37.0	2005
Nurses and midwife density (per 10,000 inhabitants)	146.0	2006

Source: World Health Statistics 2008

E-PRESCRIBING IN THE NETHERLANDS

By Michael Tan

As Europe moves from national healthcare IT programmes towards full-fledged e-health services, many experts see e-prescribing as a key foundational step. There is a strong business case, accompanied by equally strong perceptions, that improving the prescribing and medication management process with IT will directly reduce errors, increase service quality and the delivery of effective care across the spectrum. Given below is an analysis of e-prescribing in the Netherlands.

National Programme for Pharmacy

Nictiz -the National IT Institute for Healthcare in the Netherlands - was founded in 2002 by the Dutch government to improve healthcare processes through the use of IT. The organisation laid down their plans for a decentralised national infrastructure based around a National Switchpoint, but of course an infrastructure by itself has no purpose, unless it has content. Therefore, the first focus of Nictiz was the pharmacy domain, because its use was widespread through all levels of healthcare. Implementing this domain would imply that a major chunk of the healthcare sector would need to connect to the national infrastructure.

The Dutch national implementation started with the medication history of patients. The history is based on dispensing information retrieved from community pharmacies. The rollout of this project is currently active and is carried out by IT vendors and professional associations under supervision of the Ministry of Health. Nictiz itself is already occupied with additional functionality in the pharmacy domain, which is grouped under the rubric of EMD plus.

E-Prescribing

E-prescribing is the next functionality which Nictiz is planning to implement.

There is probably little need to explain

the benefits of e-prescribing in detail. Most readers would have come across various articles explaining the advantages of electronic prescribing with arguments such as:

- ▶ Preventing transcription errors of unreadable handwritten prescriptions.
- ▶ Improving medication safety by cross-checking on double medication, contra-indications, dosage and medication interactions at the moment of prescribing. Preventive checking is more effective than medication safety checking at the moment of dispensing.
- ▶ Logistic improvements and lowering in the costs of handling. With first time prescriptions the gain is not so significant, because in general the prescriber would note down a generic drug name and the pharmacist would still need to do some manual handling to select an appropriate brand name. However, with repetitive prescriptions the handling would yield tremendous logistic advantages.

Currently, most GPs in the Netherlands are already registering their prescriptions electronically, although some still print it out and give a printed version to the patients and/or fax it to the pharmacy.

Once such prescribers become used to the computer, it will be regarded as a small step forward to send the prescription through a network. 70 to 80 percent of the volume of all prescriptions are repeat prescriptions and these are often generated by the GPs.

Moving the Laggards

So the key question in the Netherlands is about those yet to begin prescribing electronically and what would be the benefits in getting the last of the Mohicans behind a keyboard. Surveys show that specialists, giving consultation to patients in an ambulatory setting or day care, are still reluctant to use electronic devices to enter patient data. Unlike a GP who generally has the workstation on a desk in the consultation room, it is the mobility of the specialists, running from one consultation room to another, which prevents them from sitting down behind a workstation. Currently, it is easier for a specialist to jot down a written prescription, than taking his or her place behind a workstation to register an electronic prescription.

For patients in an institutional setting, the circumstances are different. A team of nurses, assistants and institutional pharmacists form the backup for the doctor to help the prescriber with the registration of medication information. Medication safety is still the key driver in order to get this last group to make electronic prescriptions.

In the Netherlands, it is customary for patients to be treated by a GP in the first stage and only consult a specialist after referral by the GP. There are chances that patients are in a more serious or complex condition than would be the case if the GP would treat the patient himself. Dosage of the medication could then be more critical and therefore cross-checking with the

help of computerized software would be more essential.

What are the functions we want to introduce in the Netherlands through the national programme? The e-prescription will be equipped with an electronic signature from the prescriber, thus making the paper version obsolete. Secondly, the reason for prescribing will be included in the prescription when it is necessary, providing the pharmacist with essential information for the correct dosage. This is mostly the case with multiple purpose drugs.

The Electronic Signature

The requirement for a signature on a prescription is based on common European legislation. The Dutch version of this law has been renewed to accept an electronic signature as a valid token from a recognised prescriber.

Signing data might seem straightforward, but there are certain pitfalls in the choice of the signed data. In the basic method, the process of signing data and the generation of the message or document are handled at the same software level. However, this is often not the case in hospitals. The workstation on which the prescriber is signing off a prescription is generally a different software layer than where the document or message is generated. Messages or documents are generated by communication engines. This means that certain coded elements which have to follow certain messaging conventions are not (yet) available at the moment of signing. These conventions are either XML or HL7v3 conventions. An example is the dosage instruction which is transferred as a complex GTS (General Time Specification) datatype.

WYSIWYS: What You See Is What You Sign

Given the above reasons, Nictiz has regarded the intent of the prescriber as the focus on which the signed data is to be signed. In other words "what you see, is what you sign". This choice means that the prescriber has to understand what he or she is signing. In many cases, coded elements (for example a product code) could be meaningless for a prescriber. It is often the case that a user

selects through a data-item by picking out a displayed text without seeing the code that is generated in the software. Therefore, the displayed text is regarded as leading, as compared to the coded data in the signed fields. The coded form is merely attached to make computerized checking possible at the receiver's side.

However, if any discrepancy between text and code is found, then the signed text will be regarded as the rightful signed data.

Closing the Gaps

There are still certain matters to address with regards to the use of electronic signatures with prescriptions. The electronic signature is mainly a method to identify the rightful origination of the prescriber. It is basically focussed on securing the transfer of signed data and much less the uniqueness or the persistence of the document. The verification of the validity of signed data is valid as long as the certification of the signature still can be recalculated. The chipcard of the prescriber is valid for a period of three years. This could mean that a prescription, that is signed at the end of the validity period, would appear as non-valid if checked shortly after the end of the validity of the card. The chances, however, of the need to review a prescription by the inspection are almost nil and the question is how far do we need to take measures to address such rare situations in advance.

A copy of an electronic file is undistinguishable from the original and an electronic signed prescription would be just as valid as the original signed document. This is where the Dutch national infrastructure, called AORTA, comes into place to prove the uniqueness of issued prescriptions.

The core of the national infrastructure is the National Switchpoint. The switchpoint not only logs and identifies correct transactions, but also takes care of proper routing of all transactions. All electronic prescriptions which are transferred through the National Switchpoint will be registered in the index and therefore securing uniqueness of the signed prescriptions.

Interventions

Once electronic prescriptions are available, the need for intervening on the pre-

scription will be necessary. Of course, the phone is always there for emergency cases, but more often getting in touch with the responsible prescriber can be a time consuming effort. Users have underlined the need of an electronic intervention to optimise the support of the electronic prescription process and to report a reliable medication profile of the patient. For a reliable reporting, a meaningful registration of the time interval in which the prescription is active is important.

Underlying this need is the philosophy that the prescription is in essence not only logistic order to supply medication, but an agreement between the prescriber and the patient to follow a certain therapy. In fact stakeholders have suggested that a prescription, which consists of both a dispensation information section as well as one on administration instructions, could contain only dosage instructions with a zero supply, if the prescriber and the patient conclude that the patient had enough stock in his possession and only required to change the dosage.

To be able to signal changes, an intervention message is available to pass on the modification in the therapy. The use cases are:

- ▶ The original prescriber nullifying or adjusting the therapy of his or her own prescription to notify or alert the dispenser of the change;
- ▶ Another prescriber notifying the original prescriber that a patient is now in his or her care and that the therapy had to be changed, and
- ▶ A dispenser requesting the original prescriber to provide a new prescription, because of issues discovered with the original prescription.

An example of the second use case is where a patient is institutionalised and discharged from hospital. These moments of transfer are often precarious moments, where until now the lack of information has led to hazardous situations on medication safety. If the instructions to the patient or attending family or personnel are not clear, it could end up with double medication or improper dosages.

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NVZD: THE DUTCH ASSOCIATION OF HEALTHCARE DIRECTORS

NVZD represents the collective and individual interests of healthcare directors. Their aim is ensuring quality in professional activities and promoting the interests of their 800 members.

The Association focusses on developing and maintaining quality drivers in healthcare. Quality healthcare is key. A voluntary accreditation system has been implemented to ensure transparency.

NVZD, as an association of directors of healthcare institutions wants and needs a unifying and guiding role in the development of healthcare in the years to come. Directors must be seen as proactively guiding their institutions and the development of healthcare as a whole.

The Association holds a conference every year, a national meeting of directors. It is an opportunity to share knowledge concerning healthcare management, an opportunity for training and also for reflection.

A Little Bit of History

The Dutch Association of Hospital Managers was founded in 1979 as a professional association for executives in hospital care. Up until 1996 the directors were mainly affiliated with hospital care. But due to social changes in healthcare such as mergers between institutions and organisations for hospital outpatient care the Association decided to expand their membership criteria to include directors of outpatient care.

This change resulted in a modification of statutes and more strikingly a modification of the name to NVZD-The Dutch Association of Healthcare Institution Directors. In 2004 this was further modified to become the Association of Healthcare Directors as it is today.

In 2006 the General Assembly decided that retired members of the NVZD should be grouped in a separate association: Nestores.

Who Can Become a Member?

Membership of NVZD is open to:

- ▶ Managers of healthcare institutions
- ▶ Those responsible for managing or directing the institution who are directly accountable to a supervisory body.

Interim managers are not admitted in the association.

Healthy Ambition: NVZD Policy 2008-2010

During the period of 2008-2010 focus will remain on the individual and collective interests of healthcare institution directors but the main policy is the transition of the NVZD to a reliable and modern association providing knowledge for managers in healthcare.

Activities include the assessment of management training and the provision of legal support while employed and after dismissal. Issues such as diversity and the role and interaction with supervisors are high priorities.

The annual conferences should not only be regarded as opportunities to learn and share experiences but also as a meeting place. They should be used to foster closer relationships through lunchtime groups, peer review groups and regional content related groups.

The NVZD also recognises that knowledge is not only available in the Netherlands but also elsewhere in Europe and beyond. The association is working to maintain coopera-

tion with associations and universities that have already contributed so substantially and also seeking new collaborations.

These new directions in policy may seem ambitious and difficult but NVZD is committed to this role and determined to provide optimal support for managers and directors in their daily work and complex tasks.

Activities

Professionalisation and promotion of competence is a high priority in NVZD. This is reflected in the NVZD involvement in symposia, courses and individual coaching:

- ▶ NVZD is the endowed chair of the healthcare institution management department at the Erasmus university. Here, knowledge and skills of healthcare managers are identified and new insights are discovered.
- ▶ Care for Europe is a programme for experienced managers and health professionals who wish to explore European borders. Offered by Erasmus CMDz.
- ▶ The Management Audit is a specially designed coaching programme based on self-assessment. Its goal is to develop and improve management skills.
- ▶ Financial Management for Non-Economic Directors is a short and practical financial management course that gives a helicopter view on the area of financial management.
- ▶ Collegiate coaching is designed for newly appointed managers or those facing major organisational changes.
- ▶ Meet Mediation workshop trains managers mediation skills for specific conflict areas.

For more information, please visit:
www.nvzd.nl

COOPÉRATION ET GESTION EUROPÉENNE

Le processus d'intégration européenne se poursuit. En Irlande, le vote en faveur de la nouvelle Constitution était explicite. Les ratifications supplémentaires par les parlements nationaux ont été achevées et les dernières signatures du Traité sur la nouvelle Constitution sont considérées comme sûres. Le processus démocratique est laborieux, mais on ne connaît pas de meilleure forme d'organisation gouvernementale. En particulier la conception fédéraliste qui sous-tend les prises de décisions est une condition essentielle pour la répartition des pouvoirs constitutionnels légitimes entre les gouvernements et les institutions. Nous devons toutefois être certains que ce processus complexe par nature n'est transparent et contrôlable que si le principe de subsidiarité est respecté. Autrement dit, tout ce qui peut l'être sera plus profitablement réglé sur place. Les institutions de tutelle ont la tâche de construire le cadre des possibilités d'action. Une prétention certes élevée qui nécessite un équilibre permanent de compensations mais qui en vaut la peine.

L'actuelle crise économique et financière et la gestion internationale concertée ont clairement démontré l'importance de la coopération en Europe et quelles forces sont générées par le travail commun pour atténuer les crises. Les hôpitaux sont également touchés et de diverses façons, dont la plus simple concerne la question du financement des investissements. En outre, la base même du financement des systèmes de santé est affectée par la baisse du produit intérieur brut et la hausse du chômage. Cette évolution dangereuse sera encore aggravée par les problèmes structurels profonds découlant de l'évolution démographique dans les sociétés européennes. La demande accrue en soins

médicaux et infirmiers pour les personnes âgées n'est qu'un aspect du défi : le problème structurel est de plus en plus criant à cause du manque de jeunes qualifiés en médecine et en soins infirmiers. Une gestion ferme est exigée de la part des hôpitaux, mais le problème ne sera réglé que par une action concertée tant au niveau national qu'européen.

Ceci est d'autant plus significatif que les responsables des hôpitaux l'admettent et considèrent ces questions sur le plan entrepreneurial. Il est néanmoins tout aussi important que ces mêmes directeurs prennent leurs responsabilités et concentrent leurs efforts sur l'amélioration indispensable des structures et des processus de prestation de soins de santé tant au niveau national qu'européen. Les associations nationales de directeurs d'hôpitaux ainsi que l'Association Européenne des Directeurs d'Hôpitaux servent de plateforme pour cette activité. Nous avons besoin de revoir en permanence les fondements de base de notre travail dans nos organisations à la fois en termes d'objectifs et d'activités, mais aussi en regard des structures établies. Il serait plus opportun, au lieu de prévoir de mauvais scénarios, de nous efforcer de réaliser ce qui nous est imparti chaque jour un peu mieux.

La prochaine occasion de discuter de l'importante question du développement structurel de nos hôpitaux est le séminaire EAHM qui prendra place pendant MEDICA le 20 novembre à Düsseldorf. Son thème est « Vers une coopération équilibrée des acteurs publics et privés ». Nous attendons avec impatience un débat animé.

Heinz Kölking

Vice-président de l'EAHM



Heinz Kölking



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.

IT @ NETWORKING AWARDS 2009

L'AEDH était fier de collaborer avec l'« European Association of Healthcare IT Managers » pour l'organisation des *IT @ Networking Awards 2009 (IT@2009)* qui ont eu lieu les 29 et 30 Octobre 2009 à Bruxelles. *IT@2009* est un événement novateur ayant pour objectif d'apporter les dernières solutions en matière de technologie de l'information des soins de santé à l'échelle paneuropéenne.

M. Willy Heuschen, secrétaire général de l'AEDH, représentait l'association. Au cours de son discours de bienvenue, il a mis l'accent sur l'importance des technologies de l'information des soins de santé pour la gestion hospitalière, soulignant que nombre de gestionnaires s'efforcent d'en apprendre davantage dans ce domaine. Il a fait observer qu'une solution IT adaptée peut améliorer le rapport coût-efficacité, la productivité et la précision, mais que ce secteur complexe pouvait paraître déconcertant pour les directeurs d'hôpitaux, surtout si l'on considère qu'un mauvais investissement peut avoir des effets désastreux. Pour cette raison et afin de leur donner les moyens de prendre les bonnes décisions, l'AEDH s'emploie à tenir ses membres informés.

Il a réitéré l'engagement de l'AEDH dans les technologies de l'information de santé, citant le nouveau groupe de travail récemment créé au sein de l'association. Le but de ce groupe est d'explorer davan-

tage les opportunités et les possibilités qu'elles apportent.

Après le dernier vote et la cérémonie finale, Viviane Reding, membre de la Commission européenne responsable de la société de l'information et des médias, a prononcé un discours dans lequel elle a souligné l'importance d'utiliser les technologies de l'information dans les soins de santé, prenant en considération la crise financière actuelle et la question de l'accès aux soins des patients résidant dans l'espace frontalier à travers l'Europe. Elle a salué les efforts des organisateurs et des participants de l'*IT@2009* en faveur du développement et du déploiement de solutions novatrices d'e-santé.

L'événement a été incontestablement une excellente occasion d'apprentissage pour tous ceux qui y assistaient. Au cours de la première journée de séances MIND-BYTE, une vingtaine de projets présentés décrivaient des bénéfices avérés que tout directeur d'hôpital sait apprécier : les coûts administratifs avaient été réduits, la qualité et la sécurité améliorées, les flux de travail facilités. Les cinq meilleurs projets sélectionnés par le public grâce à un système de vote électronique en temps réel ont pu être présentés le lendemain au cours des sessions WORKBENCH.

Après avoir assisté à la présentation détaillée et aux séances de questions-

réponses de chaque finaliste, le public a fait son choix : le gagnant est le projet « Groupement de coopération sanitaire SISRA et Dossier Patient Partagé Réparti (DPPR) », mis en place en France dans la région Rhône-Alpes et présenté par le Dr Pierre Biron.

Le réseau de capture et de stockage des données est construit et renforcé par un système novateur d'accès à l'identification pour les patients et les cartes d'identité de santé des professionnels. Il garantit la sécurité et la confidentialité à toute heure et en tout lieu et permet aux patients de rester les gardiens de leur propre dossier, offrant ainsi une réponse à l'une des questions les plus délicates à laquelle nous sommes partout confrontés avec l'e-santé : qui possède et contrôle les données du patient ?

La deuxième place a été attribuée au projet « Numérisation du programme national de lutte contre le cancer du sein en Hollande » présenté par Bert Verdonck, Pays-Bas.

La troisième place est revenue à « Du texte libre à une terminologie normalisée : projet national de développement sur la documentation des soins infirmiers en Finlande », présenté par Kaarina Tanttu, Finlande.

Le projet gagnant a reçu le trophée de l'*IT@2009* et une bourse de 5 000 euros.



▶ Un projet de bons mis en place dans un système public d'assurance maladie

Par Marek Pavlík et Zuzana Darmopilová

Les marchés de la santé sont traditionnellement perçus comme des domaines caractérisés par une réglementation publique « rationalisée » : l'offre et la demande peuvent en être réglementés. Les systèmes de chèques ou bons peuvent être considérés comme des instruments de stimulation de la demande en transférant le pouvoir d'achat au client.

Il semble que les bons soient pertinents dans les trois cas suivants :

1. Les bons pour les prestations supplémentaires et les soins préventifs : ils permettent d'inciter les patients à un comportement responsable.
2. Les bons pour les groupes socialement exclus : distribués par les ONG ou des institutions gouvernementales sous forme papier, ils pourraient être plus attrayants que les programmes de prestations utilisés habituellement.
3. Les bons pour les immigrés clandestins : distribués par les ONG avec le soutien du gouvernement, ils représentent un outil de soutien de ce groupe vulnérable.

D'un point de vue managérial, un système de bons ne peut fonctionner que si les obstacles administratifs sont supprimés et si l'ensemble du processus se distingue par sa clarté et sa simplicité d'utilisation. Pour la mise en œuvre réussie d'un tel système, le soutien des prestataires et des compagnies d'assurance de santé est primordial.

▶ Les groupes homogènes de malades : une perspective systémique

Par Carlos Segovia

L'utilisation des groupes homogènes de malades (GHM) est une façon de décrire l'activité clinique fondée sur les ressources consommées. Ils ont été déterminés en vue de définir un mécanisme de règlement équitable, veillant à ce que les ressources soient dirigées exactement où elles seront utilisées. Les GHM pourraient allouer des ressources aux prestataires de soins en fonction des services effectués, améliorant ainsi l'efficacité de la distribution des moyens. Cependant, une fois que les GHM sont devenus la base de paiement des services, ils constituent l'un des principaux moteurs du comportement clinique, conduisant non seulement à des résultats désirés, mais également à des résultats inattendus.

L'expérience de paiement par les groupes homogènes de malades ainsi que de nombreuses autres expériences sur la qualité des soins et la gestion de la santé montrent l'importance de prendre en compte les interrelations existant en-

tre les différentes fonctions des systèmes de santé, plutôt que de les conceptualiser un à un. Les systèmes de santé ont besoin d'avoir plus de connaissances empiriques concernant leurs performances. Il est intéressant de constater que les GHM peuvent y contribuer, à condition que leur création soit basée sur des informations cliniquement pertinentes.

▶ Un système de partenariats pour des hôpitaux florissants

Par Heinz Kolking

Chaque hôpital est une entreprise complexe et très technique qui mérite de disposer des structures adéquates et des processus efficaces in situ afin de garantir un bon fonctionnement. Cela nécessite un grand nombre de connaissances spécialisées et de multiples ressources en matière de technologie et d'organisation, ce qui peut être au-delà de la capacité d'un seul hôpital. Le meilleurs résultats sont obtenus en réunissant les savoir-faire industriels avec les consommateurs au sein du milieu hospitalier par la création d'un système de partenariats.

La priorité absolue est l'amélioration de la qualité de l'hôpital et des soins de santé par l'optimisation des structures, des processus et des résultats. Les partenariats de systèmes requièrent qu'un niveau important de responsabilité soit donné à tous les partenaires concernés. Cela peut être aménagé au niveau contractuel sous la forme de coopérations. D'autres options institutionnelles incluent la création et le fonctionnement d'initiatives communes dans lesquelles les deux partenaires détiennent une part proportionnelle, l'hôpital détenant généralement la majorité. Les systèmes efficaces de partenariats permettent des économies claires en coûts d'exploitation et d'investissement, ainsi que l'accroissement de la qualité des processus.

▶ La coopération public-privé pour les soins de santé

Par le Dr Silvia Ondategui-Parra

Le partenariat public-privé se réfère à un arrangement entre le gouvernement et le secteur privé, son objectif principal étant d'apporter une infrastructure publique, les installations communautaires et autres services connexes. À long terme, ces partenariats se caractérisent par un partage des investissements, des risques, des avantages et des responsabilités pour le bénéfice mutuel des deux parties concernées. Voici les cinq principes majeurs du partenariat public-privé : s'appuyer sur l'expérience passée ; devenir un meilleur partenaire ; sauvegarder l'intérêt public ; reconnaître la contribution du personnel et développer des partenariats novateurs.

▶ **Un aperçu de l'application de la notion d'avenir durable dans les soins de santé**

Par Paul Whaley

Les concepts de durabilité prennent racine dans les soins de santé. Le sujet devient de plus en plus présent au fur et à mesure que la menace du changement climatique s'accroît. La pression pour réduire l'impact environnemental se fait sentir tout au long des démarches relatives à la santé et concerne les achats, la gestion des déchets, la consommation d'eau et d'énergie, la production d'énergie, les transports, les services alimentaires et les projets de construction.

Pour son nouvel hôpital, le New Karolinska Solna (NKS) qui devrait ouvrir en 2015 au cœur de Stockholm, la Suède s'oriente sur la création d'un environnement de soins de santé durable. Son objectif le plus ambitieux est de réduire à zéro l'émission de dioxyde de carbone. Tous les matériaux qui seront utilisés dans la construction et pendant le cycle de vie opérationnel de l'hôpital seront économes en ressources. Indépendamment de ce qui est fait actuellement, la condition première est que toute l'énergie achetée par l'hôpital provienne d'une source renouvelable. Même les groupes électrogènes de secours doivent satisfaire à cette exigence.

▶ **Une gestion de la communication pour la sécurité des patients : le projet PACT**

Par Sally Squire, Eileen Petrie, Eileen Clark, MaryEllen Mickle

Le processus de transfert de données cliniques est une composante intégrante des soins aux patients. La communication entre les cliniciens concernant l'état du patient, le traitement et le dispositif de soins en cours a un impact direct sur la qualité des résultats de santé et le succès de ce même dispositif. Les professionnels de santé doivent apprendre à communiquer de façon claire, concise et appropriée dans des environnements de soins de santé souvent pressés, bruyants et frénétiques.

L'initiative développée en Australie et intitulée « Le projet PACT » (Patient assessment, Assertive communication, Continuum of care and Teamwork with trust) a pour but d'évoquer les éléments essentiels d'une transmission clinique efficace : évaluation du patient, assertivité, continuité des soins et travail d'équipe dans un climat de confiance. Deux outils de communication développés par l'équipe responsable du projet en sont devenus la pierre angulaire. Le premier était une « transmission écrite concise » qui a fourni le modèle pour la standardisation de la transmission lors du changement d'équipe de travail, le deuxième était un modèle ou script de communication qui devait être

suivi par les infirmières lors de leur contact téléphonique avec un spécialiste pour décrire l'état du patient qui nécessitait une visite. Le défi permanent que présentait ce projet était de maintenir l'enthousiasme du personnel et l'observation de la structure d'un tel programme.

▶ **Les cardiologues utilisent de plus en plus les échographes portables**

Par Diane Wilkinson

Le marché des équipements d'imagerie par ultrasons connaît actuellement une nette tendance à la miniaturisation. L'augmentation spectaculaire de l'utilisation des appareils de petit format, portables, a induit une augmentation de la vente des échographes, en particulier en cardiologie. La tendance à la portabilité contribue à la qualité de la prise en charge, et, en définitive, profite aux patients. Répondant à l'objectif d'accroître l'efficacité et la productivité des hôpitaux et des cliniques, ces améliorations sont nécessaires pour pouvoir prendre en charge plus de patients, avec des débits plus élevés, et, par conséquent, elles contribuent à la survie de nombreux hôpitaux et cliniques.

Une récente enquête menée par InMedica sur l'utilisation de l'échographie dans les hôpitaux et centres d'imagerie d'Europe occidentale a montré que les cardiologues s'attendent dans un avenir proche à recourir plus souvent à un échographe portable grâce à l'émergence des nouvelles applications de l'échographie en cardiologie comme aux urgences, en réanimation ou au lit du patient.

▶ **Les Pays-Bas**

Selon le rapport annuel de l'« Euro Health Consumer Index », les Pays-Bas possèdent le meilleur système de santé d'Europe. Une enquête européenne les place à la tête du palmarès des pays européens pour la deuxième année consécutive en ce qui concerne les délais d'attente des patients, la santé en ligne et l'accès aux médicaments. Ce qui rend le système de santé néerlandais si particulier ? Une réforme en 2006 a vu la mise en œuvre d'un nouveau système d'assurance de santé fondé sur la répartition du risque afin de créer un équilibre entre une solide base sociale et les dynamiques du marché, le patient restant la préoccupation centrale.

La nouvelle loi sur l'assurance de santé garantit une nouvelle norme d'assurance pour tous et donne au citoyen le droit de changer d'assureur chaque année. Les assureurs étant maintenant en mesure de rivaliser pour conquérir les assurés, les clients et les assureurs devraient conjointement inciter les prestataires à procurer des soins de meilleure qualité. Une indemnisation est également assurée pour les personnes à faibles revenus.

EUROPÄISCHE ZUSAMMENARBEIT UND MANAGEMENT

Der europäische Prozess zur Integration geht weiter. Das Votum der Menschen in Irland für eine neue Verfassung war eindeutig. Zuvor waren weitere Ratifizierungen in Nationalparlamenten abgeschlossen worden und die noch abschließenden Unterschriften unter den Vertrag zur neuen Verfassung gelten als sicher. Demokratie ist mühsam, aber es gibt keine bessere Form der staatlichen Organisation. Insbesondere die föderalistische Gestaltung von Entscheidungen ist eine wesentliche Voraussetzung der Verteilung von legitimer rechtsstaatlicher Macht von Regierungen und Institutionen. Allerdings wird man darauf achten müssen, dass die diesem Prozess innewohnende Komplexität nur dann transparent und steuerbar ist, wenn das Prinzip der Subsidiarität ausreichend Raum behält. Dies bedeutet, dass all die Dinge „vor Ort“ geregelt werden, die dort besser aufgehoben sind. Übergeordnete Institutionen haben die Aufgabe, den Rahmen der Handlungsmöglichkeiten abzustechen. Sicher ein hoher Anspruch, der eine ständige Balance von Gegengewichten erfordert, aber es lohnt sich.

Nicht zuletzt die andauernde Finanz- und Wirtschaftskrise und das abgestimmte internationale Management haben deutlich gezeigt, wie wichtig die Zusammenarbeit in Europa geworden ist und welche Kräfte gemeinsam erzeugt werden können, um Krisen abzumildern. Auch die Hospitäler sind in vielfältiger Weise von der Finanz- und Wirtschaftskrise betroffen. Dies gilt unter anderem für schlichte Fragen der Finanzierung von Investitionen. Darüber hinaus sind jedoch die Grundlagen der Finanzierung der Gesundheitssysteme existenziell betroffen, wenn die Bruttoinlandsprodukte rückläufig sind und die Arbeitslosigkeit steigt. Überlagert wird diese bedrohliche Entwicklung durch tiefgreifende strukturelle Probleme der Gesellschaften in Europa, die sich aus der Demographie ergeben. Dies spüren die Krankenhäuser unmittelbar durch die zunehmende Notwendigkeit der medizinischen und pflegerischen Versorgung älterer Mitbürger. Dies ist

jedoch nur die eine Seite der Herausforderung. Immer deutlicher wird das strukturelle Problem durch den Mangel an qualifizierten jungen Nachwuchskräften in Medizin und Pflege. Sicher ist hier das Management in den Krankenhäusern gefordert, aber zur Bewältigung der Probleme bedarf es einer konzertierten Aktion auf nationaler, wie auf der Ebene der Europäischen Union.

Umso bedeutsamer ist es, dass sich auch die unmittelbar Verantwortlichen für das Management in den Krankenhäusern dieser Fragen annehmen. Dies geschieht natürlich auf der Ebene des unternehmerischen Handelns in den Hospitälern. Ebenso wichtig ist es aber, dass die Krankenhausdirektoren auf nationaler wie auf europäischer Ebene ihre Verantwortung wahrnehmen und die notwendigen Veränderungen in den Strukturen und Prozessen der Gesundheitsversorgung mitgestalten. Hierzu bieten sowohl die nationalen Verbände der Krankenhausdirektoren wie auch die Europäische Vereinigung der Krankenhausdirektoren die Plattform. Allerdings bedarf es auch hier einer ständigen Überprüfung der Grundlagen der Arbeit in unseren Verbänden sowohl hinsichtlich der Ziele und Aufgaben als auch im Hinblick auf die Strukturen. So sind wir alle aufgefordert, statt schlimme Szenarien zu prognostizieren, die Dinge, für die wir verantwortlich sind, jeden Tag ein wenig besser zu machen.

Die nächste Gelegenheit, sich öffentlich mit einer wichtigen Frage zur strukturellen Weiterentwicklung der Hospitäler zu stellen bietet das Seminar der EVKD auf dem Deutschen Krankenhausstag während der MEDICA am 20. November in Düsseldorf. Dort wird das Thema „Auf dem Weg zu einer fairen Zusammenarbeit zwischen öffentlichen und privaten Leistungserbringern“ aufgegriffen. Wir freuen uns auf eine rege Diskussion.

Ihr
Heinz Kölking
 Vizepräsident EVKD



Heinz Kölking



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.

IT @ NETWORKING AWARDS 2009

Die EKVD war stolz darauf, mit der 'European Association of Healthcare IT Managers' bei der Organisation des *IT @ Networking Awards 2009 (IT @ 2009)* zusammenzuarbeiten, der vom 29.-30. Oktober 2009 in Brüssel stattfand. *IT @ 2009* ist eine innovative Veranstaltung, welche die aktuellsten Healthcare IT Lösungen auf die paneuropäische Bühne bringen will.

Willy Heuschen, Generalsekretär der EKVD, erschien als Repräsentant seiner Organisation. In seinem Willkommensgruß unterstrich er die Wichtigkeit von Healthcare IT für das Krankenhausmanagement und auch die Tatsache, dass sich viele Manager bemühen, mehr über diesen Bereich zu lernen. Wie Hr. Heuschen bemerkte, kann die richtige IT-Lösung sowohl die Kosteneffektivität als auch die Produktivität und Präzision verbessern; allerdings handle es sich bei Healthcare IT um einen komplizierten Sektor, der auf Krankenhausmanager oft abschreckend wirke – vor allem im Lichte der verheerenden Auswirkungen, die eine schlechte Investition haben kann. Aus diesem Grund arbeitet die EAHM daran, Mitglieder auf dem neuesten Stand zu halten, damit diese die richtigen Entscheidungen treffen können.

Der EKVD-Generalsekretär betonte auch nochmals das Engagement seiner Organisation für Healthcare IT, und erwähnte in

diesem Zusammenhang die neue Arbeitsgruppe für IT, die kürzlich innerhalb der Organisation eingerichtet wurde. Der Zweck dieser Gruppe ist die weiterführende Untersuchung der Gelegenheiten und Möglichkeiten, die Healthcare IT mit sich bringt. Nach der endgültigen Wahl und der Preiszeremonie hielt die EU-Kommissarin der Generaldirektion Informationsgesellschaft und Medien, Viviane Reding, eine inspirierende E-Rede, in der sie die Wichtigkeit unterstrich, IT im Gesundheitsbereich einzusetzen – auch angesichts der aktuellen finanziellen Krise und der verschiedenen Kernfragen bezüglich grenzüberschreitender Patientenbetreuung in ganz Europa. Den Anstrengungen der Organisatoren und Teilnehmer der *IT @ 2009* spendete sie Beifall, besonders für deren Anteil an der weiteren Entwicklung und Bereitstellung innovativer e-health Lösungen.

Die Veranstaltung bot allen Teilnehmern auf jeden Fall eine gute Möglichkeit der Fortbildung. Während des ersten Tages wurden MINDBYTE Sitzungen über 20 Projekte präsentiert, welche die erwiesenen Vorteile, die Krankenhausmanager erwarten dürfen, veranschaulichten: minimalisierte administrative Kosten, verbesserte Qualität und Sicherheit und Leichtigkeit im Arbeitsfluss. Die mithilfe des hochmodernen, peer-to-peer elektronischen Wahlsystems vom Publikum ausgewählten Top-fünf Projekte

schafften es dann in die WORKBENCH Sitzungen des zweiten Tages. Nach detaillierten Präsentationen und Frage- und -Antwort Sitzungen für jedes Projekt wählte das Publikum: Das 'SISRA Informationssystem' und der 'DPPR Shared and Distributed Patient Record', in der französischen Rhône-Alpes Region implementiert, präsentiert von Dr. Pierre Biron, machte das Rennen. Das Datenerfassungs- und -speichersystem wird aufgebaut und gestützt von einem innovativen Identifikationszugangssystem für Patienten- und Gesundheitspersonal Identitätskarten, was Sicherheit und Vertraulichkeit garantiert – zu jeder Zeit, an jedem Ort. Noch wichtiger: Es erlaubt Patienten, als Wächter ihrer eigenen Personalakten zu fungieren, und bietet somit eine praktikable Antwort auf eine der verwickeltesten Fragen im Bereich von e-health weltweit: Wer besitzt und kontrolliert Patientendaten?

Der zweite Platz ging an 'Digitisation of the Nationwide Breast Cancer Screening Programme in The Netherlands' (präsentiert von Bert Verdonck, Niederlande). Den dritten Platz eroberte 'From Free Text to Standardised Language – The National Development Project of Nursing Documentation in Finland' (präsentiert von Kaarina Tantt, Finnland).

Die siegreiche Lösung erhielt die *IT @ 2009* Trophäe und den Bargeldpreis von € 5.000.



ITa NETWORKING AWARDS 2009



▶ **Gutschein-Modelle im öffentlichen Versicherungsgesundheitssystem**

Von Marek Pavlík, Zuzana Darmopilová

Märkte im Gesundheitsbereich werden üblicherweise als Schauplätze angesehen, die durch „rationalisierte“ staatliche Regulationen charakterisiert sind. Aufgrund dieser Tatsache können sowohl Angebot als auch Nachfrage reguliert werden. Gutschein-Modelle gelten als stimulierend für die Nachfrageseite; die Kaufkraft wird auf den Kunden übertragen. Gutscheine scheinen in drei Fällen geeignet zu sein:

- ▶ Gutscheine für „überdurchschnittliche“ und „präventive“ Betreuung, um verantwortungsvolles Verhalten von Patienten zu fördern
- ▶ Gutscheine für sozial ausgeschlossene Gruppen – von NGOs oder staatlichen Institutionen in Papierform ausgeteilt; sie können verlockender sein als die üblichen Sozialhilfeprogramme
- ▶ Gutscheine für illegale Immigranten – von NGOs (unterstützt von der Regierung) ausgeteilt; sie stellen ein Werkzeug für die Unterstützung dieser von der Gesellschaft ausgeschlossenen, hilfsbedürftigen Gruppe dar.

Aus betrieblicher Sicht könnte das Gutscheinsystem dann funktionieren, wenn administrative Hindernisse aus dem Weg geräumt werden und der gesamte Prozess klar und einfach gestaltet wird. Für die erfolgreiche Implementierung eines Gutscheinsystems ist der Support von Providern und Gesundheitsversicherungen (health insurance companies, HIC) ausschlaggebend.

▶ **Öffentlich-private Partnerschaft im Gesundheitswesen**

Von Dr. Silvia Ondategui-Parra

Die öffentlich-private Partnerschaft (public private partnership, PPP) bezieht sich auf ein Abkommen zwischen der Regierung und dem privaten Sektor; das hauptsächliche Ziel sind das Anbieten öffentlicher Infrastruktur, Einrichtungen für das Gemeinwesen und anderer zugehöriger Dienste. Charakterisiert sind solche langfristigen Partnerschaften durch gemeinsam getragene Investitionen, Risiken, Entlohnungen und Verantwortungen – zum gemeinsamen Vorteil beider beteiligter Parteien. Fünf Schlüsselprinzipien sind in Bezug auf PPP zu berücksichtigen: frühere Erfahrungen mit einschließen; ein besserer Partner werden; öffentliche Interessen wahren; die geleisteten Beiträge des Personals würdigen, und innovative Partnerschaften entwickeln. Generell sollten Partnerschaften angemessen, einfallsreich, holistisch und vorteilhaft sein.

▶ **Systempartnerschaften für erfolgreiche Krankenhäuser**

Von Heinz Kolking

Jedes Krankenhaus ist ein komplexer und hoch technisierter Betrieb, für dessen reibungslosen Ablauf eine adäquate Struktur und effiziente Prozesse benötigt werden. Voraussetzung dafür ist ein hohes Maß an spezialisiertem Fachwissen und vielfältige Ressourcen aus Technik und Organisation – ein einzelnes Krankenhaus kann damit überlastet sein. Die beste Vorgehensweise ist das Zusammenführen von Herstellerwissen aus der Industrie mit der Seite der Anwender in den Krankenhäusern. Oberstes Ziel ist die Verbesserung der Qualität des Krankenhauses und der Gesundheitsversorgung durch optimale Strukturen, Prozesse und Ergebnisse. Systempartnerschaften bedürfen eines hinreichenden Grades an Verbindlichkeit für alle Partner; auf vertraglicher Ebene kann dies in Form von Kooperationen geschehen. Weitergehende institutionelle Möglichkeiten gibt es durch die Gründung und den Betrieb gemeinsamer Unternehmen, an denen die Partner anteilig (das Krankenhaus meistens mehrheitlich) beteiligt sind. Erfolgreiche Systempartnerschaften ermöglichen deutliche Kosteneinsparungen im Bereich von Betrieb und Investitionen und verbessern die Qualität der Abläufe (bessere Abläufe, niedrigerer administrativer Einsatz, Standardisierung).

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▶ Diagnosebezogene Fallgruppen: eine systemische Perspektive

Von Carlos Segovia

Der Einsatz diagnosebezogener Fallgruppen (diagnosis related groups, DRG) gilt als Möglichkeit, klinische Aktivitäten in Bezug auf die verbrauchten Ressourcen zu beschreiben. DRG wurden definiert, um einen Mechanismus der fairen Bezahlung zu definieren, damit die Ressourcen genau dahin geleitet würden, wo sie auch verbraucht werden. DRG würden die Ressourcen den Providern je nach bereitgestellten Leistungen zuordnen und somit die Verteilungseffektivität verbessern. Doch sobald DRG die Basis für die Bezahlung von Leistungen sind, stellen sie einen der wichtigsten Antriebe für klinisches Verhalten dar – was zu den erwünschten, aber auch zu unerwarteten Ergebnissen führt. Die Erfahrung, mit DRG zu bezahlen, und auch andere Erfahrungen im Bereich der Betreuungsqualität und des Managements der Gesundheitsversorgung zeigen die Wichtigkeit auf, die wechselseitigen Beziehungen zwischen verschiedenen Funktionen des Gesundheitswesens in Betracht zu ziehen, anstatt sie einzeln zu konzeptualisieren. Gesundheitssysteme benötigen mehr empirische Beweise ihrer Leistung. Interessanterweise können DRG dazu beitragen, solange sie auf klinisch relevanter Information basieren.

▶ Kurzer Einblick in die Zukunft der nachhaltigen Gesundheitsversorgung

Von Paul Whaley

Nachhaltigkeitskonzepte schlagen in der Gesundheitsversorgung zunehmend Wurzeln; aufgrund des konstant näherrückenden Schreckgespensts des Klimawechsels sind sie immer häufiger im Zentrum von Diskussionen. Der Druck, die Umweltbelastung zu reduzieren, ist im gesamten Bereich der Abläufe im Gesundheitswesen zu spüren: Einkauf, Abfallmanagement, Wasser- und Energieverbrauch, Energieerzeugung, Transport, Nahrungsmittellieferung und Baudesign. Das New Karolinska Solna (NKS), ein neues Spital, das 2015 im Herzen von Stockholm eröffnet werden soll, legt den Fokus auf die Schaffung eines nachhaltigen Umfelds der Gesundheitsversorgung: null CO₂-Emissionen lautet das ehrgeizigste Ziel.

Alle Materialien, die für den Bau und während des Lebenszyklus des Krankenhauses eingesetzt werden, sollen ressourceneffizient sein. Unabhängig von den dann tatsächlich eingesetzten Systemen ist die schlussendliche Auflage, dass das gesamte Volumen der vom Krankenhaus eingesetzten Energie aus erneuerbaren Kraftstoffquellen stammt. Sogar die Backup-Stromgeneratoren unterliegen dieser Bedingung.

▶ Management klinischer Kommunikation für Patientensicherheit: das PACT Projekt

Von Sally Squire, Eileen Petrie,
Eileen Clark, MaryEllen Mickle

Der klinische Übernahmeprozess ist eine integrale Komponente der Patientensorge. Die Kommunikation zwischen Ärzten über den Zustand eines Patienten, den Behandlungsplan und die Betreuung steht in direktem Zusammenhang mit der Qualität der Gesundheits-Outcomes und des Erfolges des Systems. Gesundheitsanbieter müssen lernen, innerhalb eines hastigen, lauten und hektischen Klinikalltags klar, präzise und angemessen zu kommunizieren.

Die in Australien entwickelte Initiative namens ‚PACT Projekt‘ soll die wesentlichen Elemente einer effektiven klinischen Übernahme vermitteln: Beurteilung des Patienten, nachdrückliche Kommunikation, Kontinuität der Betreuung und auf Vertrauen basierendes Teamwork. Zwei vom Projektteam entwickelte Kommunikationswerkzeuge wurden zu den Eckpfeilern des Projekts. Das erste war eine Übergabe-Indexkarte, die als Vorlage für eine standardisierte Schicht-zu-Schicht Übergabe diente, das zweite war eine Kommunikationsvorlage oder Skriptum, das dann zum Einsatz kam, wenn das Pflegepersonal telefonisch Fachärzte über sich verschlechternde Patienten kontaktierte, die einer Überprüfung bedurften. Die andauernde Herausforderung für das Projekt ist die Beibehaltung des Enthusiasmus und der Compliance des Personals für dieses strukturierte Programm.

▶ Tragbarer Ultraschall im Anstieg begriffen

Von Diane Wilkinson

Der Markt der Ultraschallausrüstung sieht derzeit einen klaren Trend hin zur Miniaturisierung. Der dramatische Anstieg im Gebrauch tragbarer Ultraschallgeräte hat zu einem zusätzlichen Wachstum in Märkten wie dem Fachbereich der Kardiologie geführt. Die Tragbarkeit unterstützt Verbesserungen bei Leistungen vor Ort und im Endeffekt auch bei der Patientenbetreuung. Mit dem Endziel der verbesserten Effizienz und Produktivität von Krankenhäusern und Kliniken vor Augen sind diese Erweiterungen nötig, um ein erhöhtes Patientenvolumen und einen verstärkten Patientendurchsatz sicherzustellen – und in Folge das Überleben vieler Krankenhäuser und Kliniken weltweit zu sichern. Eine aktuelle Untersuchung von InMedica über den Einsatz von Ultraschall in westeuropäischen Krankenhäusern und bildgebenden Zentren hat deutlich gemacht, dass Kardiologen von einem stark erhöhten Einsatz des mobilen Ultraschalls in der unmittelbaren Zukunft ausgehen; die entsprechenden Einsatzbereiche sind unter anderem die Notfallaufnahme, Intensivstationen und auch bei Prüfungen am Krankenbett.

▶ Die Niederlande

Laut jährlichem Euro Health Consumer Index haben die Niederlande das beste Gesundheitssystem in Europa. Das Land war nun schon zum zweiten Mal in Folge Nr. eins in dieser europäischen Untersuchung, mit hoher Punktzahl für die Bereiche Wartezeiten für Patienten, E-health und Zugang zu Medikation. Was zeichnet das holländische Gesundheitssystem besonders aus? Eine Reform im Jahr 2006 bedingte die Implementierung eines neuen Systems der Gesundheitsversicherung, basierend auf einem Risiko-Ausgleich, der die Balance

zwischen einer soliden sozialen Basis und Marktdynamiken kreierte und den Patienten in den Mittelpunkt stellte. Das neue Gesundheitsversicherungsgesetz gewährleistet einen neuen Versicherungsstandard für alle und gibt Bürgern das Recht, jedes Jahr die Versicherung zu wechseln. Versicherungsanbieter sind nun in der Lage, um das Geschäft der Versicherten zu konkurrieren, und Kunden und Versicherer stimulieren Anbieter gleichermaßen zu besserer Qualität. Für Menschen mit geringem Einkommen gibt es Kompensationen. Langfristig wird dies zu besserer Qualität der Betreuung, einem gesteigerten Kostenbewusstsein und besserer Leistbarkeit der Gesundheitsversorgung führen.

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