TECHNICAL, PHARMACEUTICAL, INDUSTRIAL NEWS & MUCH MORE



See us at MEDICA

## **Telemedicine** is a core focus

**Hall 16** While it is often possible to the Porz am Rhein Hospital and other determine drug costs (or at least the defined daily dose) it is often impossible to determine actual costs of a particular case. To reach that goal, medical economist Professor Rainer Riedel, director of the Medical Economics programme at the University of Applied Sciences (RFH), Cologne, and a member of the MEDICA MEDIA advisory board, said: 'We need to combine treatment data from in- and out-patient departments. We're just starting out. In some cases, telemedicine can enable office-based physicians to have their patients admitted to hospital less often', which, of course, would help reduce costs in individual cases. However, the goal can only be reached through appropriate analysis carried out as part of healthcare management research.

At the event, the CorBene project is being discussed. In this, telemedicine is an integral part of optimised treatment schedules, and imaging procedures such as cardiac MRI and cardiac CT are also involved, as are potential telemedicine aids such as the 'Herz-Handy' cardiogram device. Participants include office-based physicians, out-patient cardiologists,

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Telemedicine may also improve monitoring of disorders such as sleep apnoea. Professor Helmut Teschler, President of the German Society for Pneumology and Respiratory Medicine, will give a presentation on how this kind of monitoring works.

Overall, the Media event is for healthcare providers, who are increasingly involved in e-health, telemedicine and medical IT. Prof. Otto Rienhoff, of the Medical IT department, Georg-August-University Hospital, Göttingen, favours telemedicine and warns that doctors who do not have this advantage will 'lag behind the competition'. Healthcare professionals, he said, are understandably suffering acceptance problems, because they began from an 'unfavourable starting point'. However, he believes that practitioners will help to shape this process because they either will acknowledge that the profession and roles will become either threatened or positively remodelled by IT.

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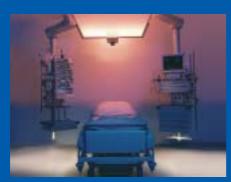


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#### **MEDICA CONGRESS**

9:00 - 9:45 CCD South, room 02

State-of-the-art: virtual colonoscopy to Decker, Ingelheim, Germany exclude colon carcinoma. Chairman: Prof. Dr. Burkard May, Bochum, Germany. Presentation: Prof. Dr.

predictive diagnostics and individualised therapy.

research results on two buzz words,

• Predictive genome analysis and individualised prevention. Example: BRCA diagnostic, Prof. Dr. Jochen

**CONGRESSES & EVENTS Thursday 15 November 2007** 

MALDI imaging: a new tool for molecular diagnostics and prognostics? Prof. Dr. Axel Wellmann, Aachen, Germany

 Anti-angiogenesis as new therapeutic principle in oncology, Dr. Wolfgang Dietrich, Grenzach-Whylen, Germany

 Epigenetic approaches to tumour diagnostics and therapy, PD Dr. Oliver Galm, Aachen, Germany

**MEDICA CONGRESS** 10:00 - 13:00 CCD South, 1st floor, room 06

Quality management and accreditation in

medical laboratories.

• Quality control in medical labs in compliance with EU and national requirements, Dr. Undine Soltau, Bonn, Germany

 New guidelines for quality control in medical labs: from quality control to quality management, Dipl. Biol. Katharina Lehnigk, Schwerin, Germany

 Introduction of a quality management system and accreditation, Dr. Andreas Steinhorst, Frankfurt/M., Germany

 A hurdle in the accreditation process: clinical chemistry, Prof. Dr. Claus Luley, Magdeburg, Germany

• Haematology, Dr. Silke Heller, Berlin, Germany

• Microbiology, Dr. Christoph Schoerner, Erlangen, Germany

• Virology, Prof. Dr. Heinz Zeichhardt, Berlin, Germany

#### **GERMAN HOSPITAL DAY** 11:00 - 13:00

CCD East, 1st floor, room M Hospital policy and politics III:

Mergers & Acquisitions of hospitals - the limits to growth. Presentations:

 Dipl.-Betriebswirt Berthold Bisping

• Ullrich Eidenmüller

• Prof. Dr. F. ter Hasenborg

• Franz Heistermann Dr. Axel Paeger

Wolfgang Pföhler

Werner Sonne

**HOSPITAL COMMUNICATIONS CENTRE (KKC FORUM)** 14:00-14:30 (Friday: 12:30-13:00. Saturday: 12:00-12:30)

Hall 16, booth C 76

Mobile Point of Care - Innovative IT technology changes the work environment of care. Chairman: Jörg Walther, Intel

**KKC FORUM** 12:00 - 12:30 Hall 16, booth C 76

The interface medical technology and IT. Chairman: Dipl. Ing. Armin Gärtner, Erkrath, Helios Kliniken Wuppertal, Germany

#### **KKC FORUM** 13:30 - 14:00 Hall 16, booth C 76

Convergence of medical technology and IT: What does it mean for providers and users? Technology for the hospital of the future. Chairman: Dr. Thomas Becks, Vice President of KKC, DGBMT Deutsche Gesellschaft für Biomedizinische Technik (DVMT)

#### **MEDICA CONGRESS** 14:30 - 17:30

CCD South, ground floor, room 01 The geriatric patient in cardio-

vascular medicine. Coronary heart disease and interventions in geriatrics, Prof Dr.

Dietrich Gulba, Düren, Germany Heart valve defects and heart insufficiency and the geriatric patient, PD Dr. Petra Schnabel, Bergisch Gladbach, Germany

 Heart surgery and the geriatric patient, PD Dr. Jürgen Ennker, Lahr, Germany

#### **MEDICA CONGRESS** 14:30 - 17:30

CCD South, 1st floor, room 04a Fit for the future with innovative

strategies and working techniques. Chairman: Dipl.-Kfm. Otto Henker, Reutlingen, Germany

#### **MEDICA CONGRESS** 14:30 - 17:30

CCD South, 1st floor, room 06

Pain therapy with acupuncture and TCM. Chairman: Dr. Stefan Kirchhoff, Sprockhövel, Germany



• Predictive and individualised:

Prof. Dr. Michael Neumaier, Mannheim, Germany

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## Display & software solutions A medium-size firm with ever-broadening horizons





**Manfred Steil** 

Whether in endoscopy, surgery, clinical diagnosis or just for viewing, the quality of the display has a significant impact on the result. In addition, the quality expectations for display systems are increasingly dependent on individual requirements in different hospitals or even departments. Over the years, MeDiSol, the medical division of Rein EDV, has specialised in flexible display solutions and established a considerable product range. Manfred Steil from Product Marketing and Sven Rahn, Product Manager Totoku & Viewmedic Displays at MeDiSol discussed these, as well as the PC- and software solutions produced by this medium-sized company based in Willich, Germany, with Meike Lerner of European Hospital

**Sven Rahn**: A further important area, which has just started to develop very well, is our range of software solutions for quality management. We are a little bit annoyed here, because, only a few years ago, we were at the cuttingedge of web-based quality management solutions. But - and this is the downside of a mediumsize company - we were not able to push ahead with this project, which has cost us time. Nevertheless, we are still quite a way ahead with our solution, which is currently installed in about 50 German hospitals. The advantage of a web-based solution

compared with our competition is that we have responded very precisely to suggestions from users, which has enabled us to supply our customers with an extremely user-friendly solution. The system is multilingual and can be updated quickly and without interruptions. So far, we have had a lot of positive feedback and we are also just beginning to install the software in other European countries. Looking at our developments so far, I am convinced that we will also be successfully established in the market with our quality assurance software in the foreseeable future.

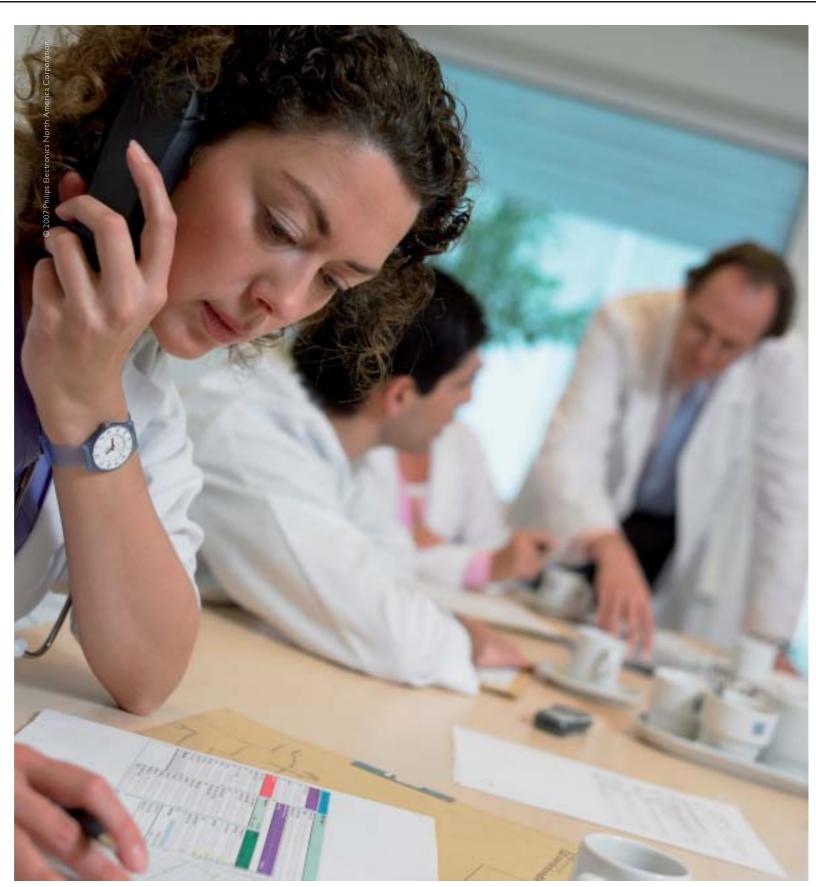
ML: MeDiSol is part of a standard computer company yet you offer a very broad medical product portfolio. How did this transpire? Manfred Steil: Rein EDV entered the medical sector as a distributor of medical displays manufactured by Totoku. We are still closely linked with Totoku and, as a distributor of the Totoku medical displays, successful not only in Germany. In addition we have started to develop our own solutions in the area of viewing displays, along with systems suitable for use in operating theatres, also supplied as displays with an integrated PC solution. With all our developments we were obviously able to build on our experience in industry and now our own developments have all become market leaders - none more so than the operating theatre solutions of our Viewmedic Vario range, which is, for instance, the ideal alternative to a conventional light-box. It combines two monitors with different possibilities for configuration along with a PC system that meets the standard user requirements. So, over the years our medical division has grown and grown to the extent that it is now generating two thirds of our overall turnover, with an upward

#### What is the recipe for the company's success?

MS: Our individuality, flexibility and service. As a medium-sized company with around 50 staff we can respond to special customer requirements systematically and with ease. These customers include large medical technology companies such as Philips, GE or Maquet, to name a few. We jointly develop solutions and then check whether we can offer the respective systems or whether we are able to develop new ones. In many cases we also offer alternatives to existing systems because we can react quickly and with flexibility, seeing how we have the support for the different areas directly in-house.

#### Which of your systems are currently in the spotlight?

**MS**: In the area of viewing displays, we have just established a completely new line-up that we have adapted to the existing market expectations for more specifications. The products have been geared towards the respective areas of use, such as endoscopy or post-processing. Our 42" monitor, which is particularly suitable for use in endoscopy or surgery, is currently also very successful. And we are continuously developing areas such as ease of use and ergometry.



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#### IT & TELEMEDICINE

Healthcare IT is set to represent 10% of the predicted EU healthcare budget by 2010. However, with the advent of any new technology come teething problems - and that particularly shows in the health sector. Interoperability is obviously a key issue - hi-tech companies can invent what they want, but, if a new machine or idea does not work well in tandem with other systems, it is effectively a waste of time and money.

Other problems involve people. Human beings in all sectors can be resistant to change and even those keen to grasp new technologies

probably will need training. Put bluntly, if the people at the business end of patient care are unable or unwilling to embrace the future of their industry, then the road forward will come to a sudden end, somewhere in the dark alley.

Hopefully this scenario will not apply to the *HIMSS*\* itself. In the United States it is well established, but in Europe this second attempt again appeared to be not very successful. Europe with its multicountry, multi-health systems and multi-language environment has a different need. In each country there are multiple - in some already too many - congresses and

The 2nd World of Health IT **Conference and Exhibition** 



Third time lucky? Copenhagen in 2009 will test the future for the World of health IT event. If, at that show, some exhibitors again tell colleagues 'Better to stay at home than come to this', it will be time to react. Health IT conferences need a 'people side' too.

\* HIMSS Established in 1961, the Healthcare Information and Management Systems Society (HIMSS) is the healthcare industry's membership organization, which is focused on '... providing global leadership for the optimal use of healthcare information technology

(IT) and management systems'. The Society represents over 20,000  $individual\ members\ and\ over\ 300$ corporate members, all of whom  $represent\ organizations\ employing$ millions. HIMSS has offices in Chicago, Washington DC, Brussels, and other areas in the USA and Europe.

## Microsoft's role in healthcare

form, which is

deploy e-health

services in the

hospital, social

service agency,

insurance com-

designed

Ten years ago, Tim Smokoff began his career with Microsoft. Since then, the healthcare arena has become a long term investment for the company and today he is Managing Director of the Microsoft Healthcare Group. The healthcare section began by offering professional services in the USA. About six years ago Microsoft formed a healthcare industries team that provided sales marketing services and support. About 18 months ago Microsoft formed a health solutions group as a separate business group within the company, specifically to consider how the Microsoft platform offerings could become more pluggable in the healthcare sector. The group also has a consumer focus. An initial product, recently introduced, is Health bulb, which allows data storage and the use devices that download data such as weight and blood pressure etc. Another is Azyxxy, an EPR-like tool that combines and enables analysis of relevant data across existing systems. Today the group employees about 600 people. Guido Gebhardt interviewed Tim Smokoff about Microsoft's current focus in the healthcare market

'What is our focus in the healthcare sector? We have a stack,' replied Tim Smokoff. 'We engage in policy and standard bodies to drive privacy and security agenda. We also engage very closely with the various industry bodies in European as well as North American markets, to drive standards for interoperability and e-health services and information exchange. At last year's HIMSS event in the US we came to market with a connected health plat-



**Tim Smokoff** 

pany, or even in a pharmaceutical environment. A collaborative model requires health plans to establish new and more customer-centric business processes.

We also do some work with National Health Service (NHS) around a common user interface, driving improvements in patient safety and the quality of delivery.

The healthcare group is also looking at what can go on top of the platforms. To strengthen Microsoft in the healthcare field, about 18 months ago we acquired Azyxxi – a product that was used in emergency departments across seven hospitals in Washington DC. It offers a comprehensive view - all previous visits, diagnosis and medications prescribed - of a an individual, as the patient arrives in an emergency department

Within the Washington Hospital system it had well over a thousand interfaces, which could be just a bitstream of a part of the instrumentation or a PACS integration with a HL7 connection to clinical systems. Azyxxi is now a set of integration tools to quickly adapt it to new interfaces. It is a repository in which information is stored and it is a set of tools that allows the creation of ad hoc views around that information. Johns Hopkins Hospital, for example, was one of the initial customers in the US.

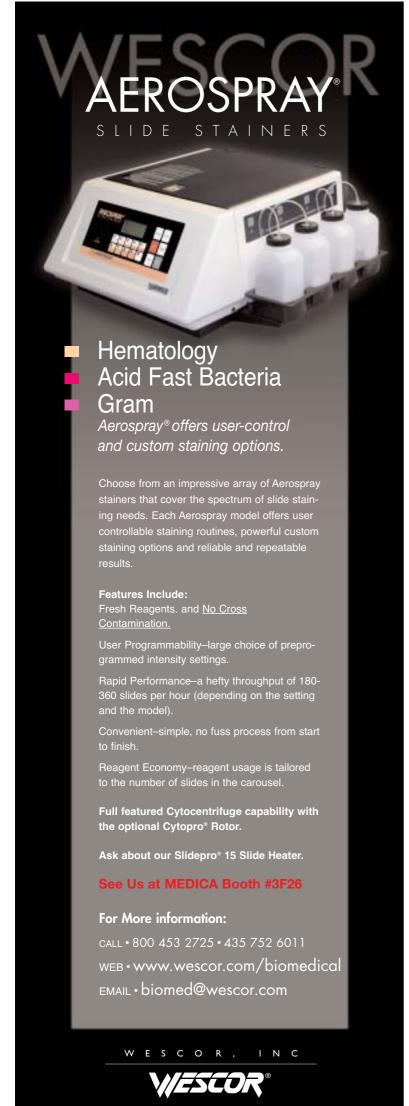
Typical use is in two camps: as a

clinical decision support tool, where there is a best of breed environment with multiple systems, and in the other camp, for decision support in business analysis. It is built to carry out research after the facts.

Azyxxy is Microsoft's first offering from the health solutions group, and we have more - we don't only have platforms; we also offer solutions on top of that.

#### What drives the success of Microsoft's healthcare group?

Today, we see a very fragmented market with very expensive solutions. We believe that, through our commodity approach with the tools we have, we can drive down the time to implement systems and the costs of those systems. Interoperability in large scale networks is a key to success. With Azyxxy, Microsoft has a powerful tool, which for the Microsoft Healthcare business is very important. This is one of the fastest growing markets and, within Microsoft, it is the fastest growing business. There is an opportunity in the market today to drive stronger integration and collaboration tools, which plays to our strength. Some of the investments we made around the service-oriented architectures, the health connection engine and the connected health platform directly address the integration challenge. So, one, healthcare is a big growth market; two, we see a very fragmented market with thousands of vendors with very expensive products. And Microsoft shows that some of the challenges in health can be solved directly with commodity software for



#### **Carestream Today and tomorrow** in the open world

In May, Kodak became Carestream. Then, Carestream was bought by Onex. This shapes part of a significant Health portfolio. Carestream was profitable and successful, but a minor part of a larger group, and it became part of a very focused medical section within Onex. Now, it is very much an independent business unit, where the management can make its own decisions and is no longer dependant on its Kodak parents. Part of the transition that Carestream must go through, is to grow from its success as number one in the market share of X-ray film and success in the medical imaging world, and its growing success in the health IT world. That would ensure it is well-placed in the transformation of healthcare worldwide. It is a massive transformation. Carestream aims to strengthen its business in IT, in the midst of digital images, digital medical records, cross-border technology and infrastructure. Today, the



Bernard Algayres, General Manager eHealth Managed Services, Carestream Health: 'Interoperability is important. IHE is the future key to success in e-health networks'

medical world is going through what the financial world faced 15 years ago, in terms of the globalization effect, with massive data centres, massive networks and crossborder technologies. Managed Services is very much a trend right across the IT segment, in telecommunication, or in finance, with straightforward desktop and server outsourcing. Guido Gebhardt spoke with Carestream Managers Graeme Allan and Bernard Algayres about their core business: taking customers from analogue to digital. What are the key trends in health IT?

Bernard Algayres: One clear key trend is the outsourcing of IT-services. In the last couple of years, we have already seen some momentum on this. Customers who have gone through one or two generations of PACS know they will have to buy more and more storage and reinvest in hardware. Furthermore they know they will have to migrate their database, so changing the PACS supplier will not be easy. For this reason we restructured our managed services business and put it up as a separate business unit. We provide archiving, documentation and imaging services on an application service provider base. Our customers only pay for what they need. The customer doesn't

Data outsourcing is very well received in Germany, Holland, Austria, and the UK and probably in the Nordic countries.

see us directly; we manage the ser-

vices in the background.

Graeme Allan: Another trend, which is more a structure trend rather than a technology trend, is the move to regional and national programmes, which we have seen building up in different parts of Europe, led quite a lot by the UK. I mean the English IT programme (for health services) was nicely split into four regions. The Scottish programme, in which we are more

instrumental, was a national programme. In my opinion, the Scottish programme is moving much faster than the English one and we are proud to be part of the Scottish approach from beginning to end. Carestream delivers the archive as well as RIS and PACS for 40 Scottish hospitals. So we see a lot of international ministry people visiting to understand exactly what Scotland has been doing. There are a lot of European countries now thinking: Can we leapfrog what other developed nations have

done? The more structure and net-

worked the healthcare systems

work, the more money they save.

One of the key points in e-health is to reduce costs and improve

Large networks involve lots of interfacing. How is that managed?

Bernard Algayres: Sharing data in large e-health networks means exchanging data. And data exchange requires a high level of interoperability, which we, as well as other providers, showcased at our booth at the Integrating the Healthcare Enterprise (IHE) gathering. IHE is the future key to success. It provides integration profiles based on DICOM and HL7 and shows how workflow and

data exchange should be organised. All major healthcare players are already IHE compliant. They all have to understood that interconnectivity is important. The world needs to be open. And we at Carestream put a lot of effort into this. Most hospital IT-integration is

radiology driven. Will other departments catch up?

Graeme Allan: Radiology is still number one in IT right now, but the trend will move on. With the success of PACS, all clinicians will want to store their images digitally. PACS will move to a kind of multimedia archive. Everyone in a hospital wants to take advantage of

integrated IT-solutions. In the near future all hospital resources will be managed by IT - and with this trend the radiologist won't be the leader of IT-investment anymore. Modern hospitals trust in CIOs to organise and run a sophisticated IT-infrastructure. The CIO will soon be the second most important guy in the hospital. In hospital groups particularly, they have to think about the whole holistic entity. It is a personal imperative to see that technology is an enabler, rather than a cost. IT is becoming predominant in decisionmaking. For us, at Carestream, it's an interesting time to be part of the transformation.

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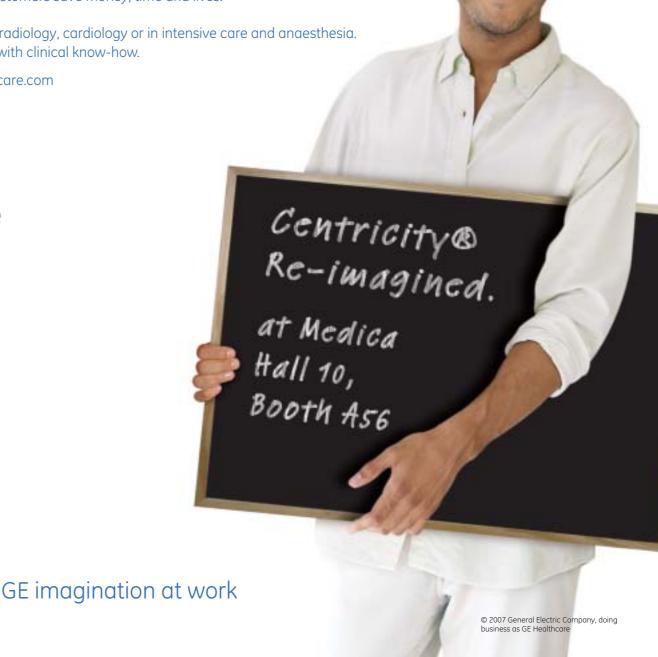
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#### **European Computerised Physician Order Entry Systems (CPOE) Markets**

physician order entry systems' (CPOE) market earned revenues of \$42.2 million in 2006; it is estimated to reach \$82.8 billion in 2013, according to a new analysis from Frost & Sullivan (http:// www.healthcareIT.frost.com).

F&S Senior Research Analyst Kiran John notes that CPOE is capable of integrating work so as to enhance patient safety, reduce recuperation periods and increase

medication effectiveness, while boosting overall financial health. 'The system provides decision support at various points of care, regularises workflows, and makes use of digital data. As a result, CPOE installations have surged as primary and secondary care centres increasingly recognise the benefits of these systems.' However, he adds: 'The problem is that it is quite invasive and, therefore, requires the presence of other key

positive affect.'

Despite growing awareness about its advantages, there remains some scepticism about CPOE being too invasive. Moreover, there are lingering concerns over CPOE-driven workflows; not all health professionals agree on its benefits, as it changes key workflows and is perceived to reduce flexibility in operation. These trends suggest that the sales community will need to spend more time training users and further customising their

products. 'If CPOE is implemented as a clerical solution that merely sends and receives requests without intelligence, its value addition will be quite limited. However, the rising need to curtail health costs, improve the effectiveness of medications, and enhance patient safety has led to the demand for decision support – an area where CPOE solutions will prove invaluable.'

F&S points out that this report is part of the Healthcare & Life Sciences IT Growth Partnership Services, which includes research in the following markets: European Electronic Medical Records. Healthcare IT Platforms, Patient Administration Systems Europe, Clinical Decision Support Systems Markets in Europe, European Patient E-Booking, and Healthcare Smart Cards Systems in Europe. 'All research included in subscriptions provide detailed market opportunities and industry trends that have been evaluated following extensive interviews with market participants.'

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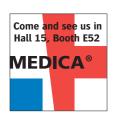
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### **Stethoscope** v. MP3 player



Sweden - According Canadian physician Neil Skjodt a simple MP3 recording device gave a superior performance in auscultation of lung and heart sounds. At the European Respiratory Society (ERS) congress, in Stockholm, Dr Skjodt, of the University of Alberta, Edmonton, told the audience that by simply pressing the microphone to the chest 'the quality, clarity and purity of the recorded sounds were better than I have ever heard with a stethoscope.' But it is still hard to interpret quiet breaking sounds, even using an MP3 Player.

The possibility of replaying and archiving the recorded data for later medical use is a further advantage of the MP3 Player. In follow-up examinations physicians could compare results and even process data with special software to analyse pathological noises.

## Telemedicine

**USA** – A team of researchers at the Rochester Institute of Technology, is working to advance the integration of radio frequency identification technology (RFID) into existing cardiac sensor networks, a new wireless technology for telemedicine delivery, and also work to enhanc security of the systems used. The research is supported by a \$400,000 grant from the National Science Foundation's Cyber Trust Programme.

Fei Hu, assistant professor of computer engineering, the principal investigator, will collaborate with Yang Xiao, professor of computer science at the University of Alabama. On the security issue, they will research the use of anti-interference technology to reduce radio distortion of these networks and design and test new RFID security schemes that will decrease the chance of information being stolen.



THE NETHERLANDS

### Home monitoring for cardiac patients

The St. Lucas Andreas Hospital in Amsterdam-West, the first in the Netherlands to begin the daily remote monitoring of cardiac patients at home, is using the *Philips Motiva* system. About 100 patients will be involved.

Due to fluid retention, those with chronic heart failure run the risk of serious complications, such as shortness of breath and cardiac arrhythmia, so weight and blood pressure must be monitored by patients daily. A rise above a certain level should be reported to the cardiac consultant to ensure necessary action. However, many inform their doctors too late so then must be rushed to hospital either to see the consultant or be admitted or re-admitted. Home monitoring should be able to prevent those emergencies.

Using a broadband connection, the Philips Motiva system sends weight and blood pressure data to the hospital daily, from a specially adapted weighing scales and blood pressure meter, which the patient keeps at home. In the near future this data also will be sent to the gen-



eral practitioners (GPs) concerned. If readings are too high, the system gives a warning signal and doctors can intervene immediately.

At the St. Lucas Andreas Hospital, Dr J Schroeder-Tanka said: 'By continually monitoring patients at home they don't have to come as often to the hospital for check-ups, which greatly improves their quality of life.'

Via remote monitoring the cardiac failure patients can also receive relevant information on diet and lifestyle, for example, instructions on how to deal with fluid retention.

#### **Further co-operation**

The optimum use of remote monitoring for patients with cardiac failure is being further developed by the cardiology team at St. Lucas Andreas Hospital in co-operation with Philips Healthcare Benelux. 'Philips is the leading supplier worldwide of cardiology equipment for use inside and outside the hospital. This partnership fits in with our goal to extend care from the hospital to the home, where we see opportunities both for lowering the cost of such care and improving patients' quality of life,' commented Bas Verhoef, general manager of Philips Healthcare Benelux.

This healthcare innovation in the St. Lucas Andreas Hospital is supported by Agis Zorgverzekeringen health insurers and the healthcare insurers' association, Zorgverzekeraars Nederland.



## Bids begin to

At Telecare 2007 exhibition held in Birmingham, UK, this September, Moira Mackenzie, the Scottish Executive's Telecare Programme Manager spoke of aim of the country's new government (minority Scottish Nationalist party, elected in May 2007) is keen to reform healthcare which it will

change through administrative reform. By 2010, she said, the Scottish Telecare Programme hopes to have telecare services (excluding community alarms) available to 75,000 people across Scotland, and an additional 19,000 patients will be able to live at home. Net savings from the telecare services are estimated to be over €57 million, over five times the cost of the telecare programme. In its first stage, projected outcomes are that 3,800 more people will be able to live at home and there will be 1,574 less unplanned hospital admissions and 430 fewer delayed hospital discharges.

Bidding has been invited for the almost €12 million telecare start-up funding from the Scottish Executive. Each bid must cite the specific health outcome that it aims to achieve.

Funding will be allocated to local



Nicola Sturgeon, Scotland's Cabinet Secretary for Health and Wellbeing on a hospital visit. Emergency admissions will reduce due to telecare

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Visible light images are vital to gain a clear picture of every patient and Sony's *BZMD-1 DICOM capture station* supports the simultaneous acquisition of still and moving material from any surgical camera

## **High-def surgical imaging**

source and integrates these with DICOM file-based workflow, the company reports. 'Offering unparallel image clarity and colour accuracy, the class-leading Sony LMD-2450MD monitor is the first 24" HD 1080P model in Sony's healthcare range. Fully compliant with medical safety regulations, the monitor's versatile design can accept a wide range of SD, HD and PC signals and has the ability to display images from a variety of medical equipment sources. It is ideal for critical endoscopic applications and the screen's Advanced Image Technology enables clinicians to see still and moving images with accuracy. To ensure colour consistency across multiple screens during surgery, the Sony LMD-2450MD utilises advanced Sony ChromaTRU colour processing technology.'

The PCS-HG90 HD visual communications system also enables true High Definition, two-way communication in real-time between up to four sites, Sony adds. 'With true colour reproduction and razorsharp detail, the PCS-HG90 allows surgeons to view

Hall 15/A2

operating room procedures from remote locations, consult with colleagues or conduct virtual lectures and training seminars.'

#### **HD** in surgery and post-operation analysis

At MEDICA this year, Sony is launching the HD video recorder **PDW-75MD**, which uses dual layer Professional Disc technology to over double the capacity of its predecessor the PDW-70MD (the world's first full 1080 HD medical recorder). 'In addition to capturing more content on each disc, the new Clip continuous REC function accelerates the process of accessing information by empowering users to tag critical scenes with *essence markers* throughout a larger single recording and even without a PC, these can be reviewed and edited on the unit. Any recording on the PDW-75MD Professional Disc can be accessed instantly through thumbnail indexes displayed on the unit's 16:9 LCD colour screen, meaning valuable time saved from fast forwarding and rewinding content.'

#### **The Finnish Society of Telemedicine**

The 13th National Conference on Telemedicine and eHealth (2-4 April 2008) will cover e-Health services for citizens, as well as the usability of applications for customers and professionals. Further information is to be published this month.

Details: www.fimnet.fi/telemedicine/eng\_tapahtumat.html

## The Association for Ukrainian Telemedicine and eHealth Development

The AfUTeHD's 1st international conference 'Telemedicine: myths and reality' was held this month in Lviv, Ukraine. The event covered essential issues and aimed to show that '... telemedicine and eHealth in general are simple, reliable, effective and easily accessible technologies that will significantly improve the quality of medical help and specialised education at all levels, to optimise the work of medical practitioners'. Details: http://www.telemed.net.ua/eng/index\_eng.htm

## The digital operating theatre MEDICA Hall 12/F19

In 1996, NDS Surgical Imaging developed and launched the first Digital Signal Processing (DSP) technologies for Minimally Invasive Surgery (MIS) viewing applications. The firm continues to develop such technology for surgical, interventional, integration, and infection control, and has a growing product portfolio for the digital operating theatre (OT) and medical imaging environments, including:

- A powerful, centralised control module that instantly routes images from numerous surgical and diagnostic imaging devices, e.g. endoscopes, ultrasound, CT, MRI, fluoroscopy, patient monitoring data, within or across operative suites.
- Telesurgery and Image Streaming ConnectOR, a device that allows image rout-



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ing via fibre optics, capture and realtime streaming of surgical and diagnostic imaging procedures onto IT networks.

- HD-ready multi-modality visualisation systems that support multiple imaging capabilities with the Radiance series. 'This product line meets today's rapidly evolving clinical needs for simultaneous viewing of real-time video, fluoroscopic, ultrasound, PACS or vital sign imaging,' the firm points out.
- Cutting Edge image acquisition technology with CMOS based ND-Cam OR overhead camera system, capturing wide angle or highly detailed video of surgical procedures.
- Digital imaging control technologies enabling OR staff to control and manage all equipment, multiple imaging modalities and deliver the appropriate image in real-time to the requesting surgeon or physician.
- Sterile-Touch screens provide effective, barrier protection against microbial transmission derived from medical imaging equipment at the point-of-care. They are designed specifically for visualisation devices that require constant contact with clinicians.

**Disinfectants** – NDS also produces OR-Cleanse and Steri-Wipe hospital-grade, hard surface disinfectant products for surgical and imaging environments.

'With the world's fastest surface disinfectant times, they help reduce Surgical Site Infections (SSI),' the company reports.

Details: www.ndssi.com



## Digital networking of four municipal hospital sites in Munich the same radiology images and results at any time and in any location, to discuss them with specialists in athor westlied folder.

One of the biggest RIS/PACS healthcare networks in Germany a Centricity system installed by GE – was recently launched at the Munich Municipal Hospital GmbH to link its 67 clinics and institutes, which are spread across four sites (Bogenhausen, Harlaching, Neuperlach and Schwabing). With a total of 3,400 beds, the hospital treats about 124,000 in-patients

Jeff Immelt: 'Now we are also Bavarians'

annually; it reported a turnover of €600 million in 2005.During a visit to Germany, **Jeff** 

Immelt, Chairman of GE's Board of Directors. ensured he was at this landmark inauguration. His company set up the GE Commercial Centre Germany in Munich in January 2006. In addition, GE has a research centre near the city's

technical university campus in Garching, on the city's outskirts. The centre is one of only four that are based in various countries around the world. 'Like some other companies, now we are also a Bavarian medical technology company,' Jeff Immelt explained, happily. Looking at the size of the project insiders soon realise that there are not many firms that could back up projects of this type with their own products and that



Prof. Andrea Rieber-Brambs

match the success of the new hospital IT installation. Reviewing tenders, became one of the deciding factors for the Munich Municipal

could

Hospital management, as well as radiologist Prof. Andrea Rieber-**Brams**, Head of the Department for Diagnostic and Interventional Radiology and Nuclear Medicine at the Neuperlach Clinic, who was directly involved in the decision-

'The Clinic GmbH Munich was only founded in 2005,' noted Franz Hafner, Head of Finance



Franz Hafner: 'The main gain with RIS and PACS is workflow optimisation' imaging

and Infrastructure at the Munich Municipal Hospital GmbH. 'That's why we are particularly pleased that we have managed to implement a modern

and diagnostics management system in such a short period of time.' This new healthcare venture also has to position itself and compete with other university hospitals in the environs, against a difficult background.

innovative IT-infrastructure of the hospital was 5.6 million Euros. The RIS/PACS means a simplified digital storage and management of complex clinical data. All doctors in the clinics within the network can access

specialists in other medical fields and decide on the appropriate therapy as quickly as possible, Prof. Rieber-Brambs added.

The clinics do not use X-ray film; the radiologists evaluate images on high-resolution computer monitors.

From the registration of a

patient in the X-ray department to the commencement of therapy by the relevant doctor, a hospital working with X-ray films has to carry out a sequence of about 30 individual operations. With a digital RIS/PACS solution that workflow can be reduced to just seven individual steps.

'The main gain for the Munich Municipal Hospital is the optimisation of patient care. Diseases can be diagnosed faster and the necessary therapies also can commence sooner,' Franz Hafner added.





The syngo Arterial Health Package determines a vascular age directly from the walls of your arteries for a more accurate measure of your risk of a heart attack and stroke. This helps physicians identify high risk patients - before it can be detected with other tests.

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#### IT & TELEMEDICINE

After a successful market penetration, TMA Medical (founded 1993) is currently expanding its Mobile Care Unit (MCU) introduction worldwide. Designed for stationary, portable use and telemedicine applications, the MCU is a stand alone multi-devices examination system operated and controlled by a specifically configured tablet-PC.

The company reports that the MCU introduces what is believed to be the first interoperable PC based platform that enables the interfacing of bio-signal sensors from different source origins, while creating a homogeneous electronic medical record that can be reviewed and transported anywhere.

The Mobile Care Unit is also said to be a breakthrough in telemedicine and e-health, representing the most afford-

### Seeking distributors, partners or investors

able Office Call Centre with user-friendly elimination, storage for evaluation; access service - remote training/supremote functionalities; all users of MCU evaluation of signal cycles (e.g. heart systems can communicate to each pulse, SPO2, respiration loop); evaluaother and exchange clinical data – send and receive - on a secure environ- to interpretation of lung function, ECG ment.' TMA Medical adds. 'Installed on ... examinations; receiving and transa personal computer, the MCU software mission functionalities of the data; enables a remote diagnostic in real- user-friendly PC based devices with the time operation and a second opinion MCU tablet PC; and calibration facilispecialist for examination or review.

#### **New in the MCU**

TMA points out the following benefits: The MCU software manages all

devices and assures the following functions: guidance to the (user) doctor, easy interaction based on touch screen client requests; data security - closed and help; acquisition of sensor signals, signal shaping, noise filtering, artefact

tion of personal data limits, assistance ties for medical sensors.

 The MCU is a portable telemedicine platform; fully controlled with a userfriendly tablet-PC; touch screen commands of all examination; open environment to most diagnostic devices in the market; customisable platform to system; remote access - export/ import data functionalities; remote port/ update; and closed system - no misuse, no uncontrolled hardware or software changes possible.

 Possible examination configurable available on the MCU include: 12 lead ECG – high end ECG with interpretation measurements; non-invasive blood pressure; pulse oximetry (SPO2) Oximeter and sensor in one; Spirometer - ATS standard; screening audiometer; blood test monitor (total cholesterol, HDL cholesterol, triglycerides, glucose, and ketones); X-ray image viewer; digital images library - picture capture functionality (from a digital camera or USB stick option); urine analysis - 11 parameters (bilirubine, ketones, glucose, blood, nitrite, densi-

### MOBILE CARE UNIT IS

ty, urobilinogen, ascorbic acid, protein, pH value and Leucocytes); and automated haematology interface; Semi Automatic Defibrillator and Ultrasound scan

 All the medical devices are PC-based and comply with the clinical standard and CE regulations.

• The MCU also can be interfaced with most of existing telemedicine platforms.

 The unit already exists in several configurations and can be customised for B2B, OEM or specific client or project

TMA Medical is currently looking for distributors, partners or investors to expand the Mobile Care Unit introduction worldwide.

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## Clinical process management

ing healthcare IT and imaging solutions, focusing on clinical process management

At MEDICA this year, Agfa HealthCare is demonstrating a '... balanced mix of information about market-leading solutions and innovations for healthcare IT and medical imaging and plenty of opportunity to exchange opinions about market developments'.

#### **Clinical ORBIS Applications**

Agfa's focus is particularly on clinical process support, presenting a new process management solution for intensive care units (ICUs) in a realistic setting. ORBIS ICU Manager allows intensive care units (ICUs) to take advantage of electronic online documentation that is simple, fast and user-friendly, the company reports. 'The solution takes into account comprehensive processes using shift models and incorporates documentation standards and quality assurance methodologies such as DGAI/DIVI.'

In terms of intersectoral communication, ORBIS ePortal allows external parties access to confidential patient-related data, e.g. private practitioners involved in treating patients. Practitioners may access patient data already entered into the electronic patient record (EPR) or contribute information to the EPR. 'The developers paid particular attention to avoiding redundancies in data management and integrating user management functionalities into ORBIS' central database.

Presented for the first time is the ORBIS InfoService, which has an innovative design allowing clinic physicians to access expert knowledge in both a focused and speedy manner. 'Taking advantage of a new ORBIS functionality, they have the option of researching diagnosisrelated literature cited in profes sional articles in Pubmed. In addition, they have access to the medical information presented in selected German-language textbooks.

#### Musica<sup>2</sup>: Radiology images never looked better

Musica<sup>2</sup>, which replaces Agfa HealthCare's leading image processing software Musica (Multi-Scale Image Contrast Amplification), enhances image quality on an unprecedented scale, Agfa points out. 'The image processing software provides for highly professional stable processes in radiological imaging and image processing.'

Imaging Informatics features



Agfa HealthCare's HIS/CIS headquarters in Bonn

IMPAX Mobile, which brings radiology images to patients' beds.

In addition,' Agfa continues, 'the spotlight is on integrated digital Xray workstation DX-Si, combining off-line detector system DX-S, traditional X-ray equipment, and acquisition workstation. DX-Si's special features include flexible, improved, and patient-friendly handling and excellent image quality.'

#### An international spread in HIS and **RIS/PACS**

At Medica, Agfa HealthCare presents itself as one of Europe's and the world's leading providers of IT-

enabled clinical workflow and diagnostic imaging solutions for healthcare institutions, and medical archiving and document management systems. Worldwide, some 50% of hospitals already work with Agfa HealthCare products and systems,' the company points out, adding: 'The ORBIS Hospital Information System (HIS) is number one all over Europe, counting some 770 installations in the German-speaking countries alone. Agfa Health-Care's RIS (Radiology Information System) and PACS (Picture Archiving and Communication System) solutions are also at the top of the European market. And vendor-neutral HYDMedia archiving and communication solution is Germany's most successful medical archiving and document management system, installed at more than 140 healthcare providers.'

Agfa Healthcare now employs around 5,700 and has distributed its products in over 100 countries.

Contacts: marketing.dach@agfa.comwww.agfa.de/healthcare

#### **Want to see Carestream Health IT portfolio in action?**

## Visit a Centre of Excellence



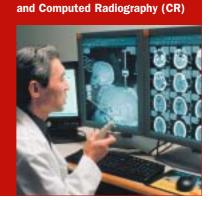
**Carestream Health has** designated several new hospitals around the world as Centre of Excellence sites, due to their commitment to being on the leading edge of healthcare technology and patient care.

In addition to hosting visits for other healthcare professionals who want to see products from the company in action, these facilities will collaborate with the company's research and design experts to develop new digital medical imaging and healthcare IT solutions internationally.

**Centres of Excellence involved:** 

- American-British-Cowdry Hospital, Mexico City, Mexico
- Hospital Israelita Albert Einstein, Sao Paulo, Brazil
- Erasme Hospital, Brussels,
- Grupo Português de Saúde, Lisbon, Portugal
- Stavanger University Hospital, Stavanger, Norway Asia Pacific
- Kitasato Medical Centre Hospital, Saitama, Japan

hese facilities have implemented systems from Carestream's digital imaging and healthcare IT portfolio including **RIS/PACS** systems, Information Management Solutions (IMS) and Digital Radiography (DR)





10

## Determining vascular age

Siemens introduces new ultrasound applications to evaluate the risk of heart disease

**New to the Siemens Medical** Solutions portfolio of ultrasound applications is the syngo Arterial Health Package (AHP), which calculates cardiovascular risks by measuring carotid intima media thickness and determining the relative 'vascular age' of the vessel. Using this, along with, for example, cholesterol values and blood pressure, a physician can better assess a patient's myocardial or stroke-related risk and establish an individual prevention and treatment plan, Siemens points out. The system was introduced for the first time in Europe, this September at the **Congress of the European Society** of Cardiology (ESC).



The ultrasound image is analysed with software. The coloured area shows the thickness of the carotid artery wall

Siemens reports: The syngo
Arterial Health Package (AHP)
determines vascular age, i.e. the
advance of atherosclerotic burden
and displays it to the patient.
Knowing vascular age helps a
physician to more accurately
determine a patient's risk of
developing coronary heart disease,
in rendering a prognosis and in
developing a prevention and
therapy plan.

The new ultrasound application provides a measurement of the intima media thickness of the carotid - the innermost layer of the carotid vessel wall. An abnormal widening of the in media is considered evidence of threatening or already existing arteriosclerosis. In addition, syngo AHP takes into account the Atherosclerosis Risk in Communities (ARIC) database to determine the risk index from the Framingham Heart Study\* using the relative vascular age rather than chronological age of a patient. To date, cardiologists use the Framingham risk factors for cardiovascular risk determination. However, the combination of vascular age, Framingham factors and ARIC data allows a more accurate determination of the risk of heart attack or stroke for up to 60% of patients.

Syngo AHP is available on the ultrasound systems ACUSON Sequoia C512, Antares, X500, X300 and CV 70 from Siemens. Recently, it became also available offline on the syngo Ultrasound workplace.

Discussing the advantages of the system, Klaus Hambuechen, head of the Ultrasound division of Siemens Medical Solutions, added that users in the USA have reported that the tool proved highly advantageous in convincing patients to change their lifestyle.

Siemens completes its portfolio of innovate tools for cardiovascular risk determination with syngo AHP. Additional applications shown at the ESC 2007 included: syngo Auto Ejection Fraction and syngo Velocity Vector Imaging (VVI). Used in combination, these ultrasound applications provide automated workflows in, for example, heart

resynchronisation therapy and coronary artery disease evaluation.

#### Background information about vascular age

The vascular age is closely related to 'biological age' affected by the status of the vessel system. Satisfactory blood circulation supplies the organs with sufficient oxygen and nutrients, ensuring proper performance. Depending on the risk profile of a human being, the thickness of the vessel wall will be increased. The vessel age can be determined by the measurement the

intima media thickness of the carotid with ultrasound. Modern ultrasound methods are able to visualise the age and determine the risk of cardiovascular disease, Siemens explains.

\* The Framingham Heart Study
Carried out by the National Heart,
Lung and Blood Institute, in
Bethesda, Maryland, in co-operation
with Boston University, the study
examines at regular intervals the
risk factors that contribute to
cardiovascular disease.
Details:

http://www.framinghamheartstudy.org/





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The Sectra PACS is built on a unique open interface that allows smooth integration of third-party clinical applications. 'This enables customers to gain access to a broad array of functionalities relevant to their medical field,'

Vital Images Inc. based in

Minneapolis, specialises in

the Netherlands and China.

(www.vitalimages.com)

advanced visualisation software

solutions for radiology, cardiology,

oncology and other medical fields.

The company also has offices in

**CLINICAL APPLICATIONS** 

Swedish IT and medical-technology company Sectra has signed an agreement with Vital Images under which Sectra will be able to integrate Vital Images' Vitrea software as part of Sectra PACS (picture archiving and communications systems)

**OF INTEGRATED THIRD-PARTY** 

**SECTRA INCREASES RANGE** 

the company adds. Through the agreement, Vital Images' clinical applications, such as virtual colonoscopy, vessel analysis and cardiac imaging will all be available to Sectra's customers as fully integrated software. The complete set of tools will be easily accessible from within the PACS user's normal reading environment.

'We see a growing demand for advanced clinical tools. By adding Vital's clinical package to our existing workstations, we can

respond to this demand, maximising the benefits to our customers,' said Anders Brodin, Sales Marketing Manager at Sectra. 'Providing Vital's software as an integrated component of Sectra PACS makes our product offering stronger and more complete.'

Contact: Dr Torbjörn Kronander, President, Sectra Imtec AB, +46 705 23 52 27 Dr. Jan-Olof Brüer, CEO and President, Sectra AB, +46 13 23 52 09. Website: http://www.sectra.com

#### **RESEARCH**

## BlackBerries may be good for your health

Researchers in the United Kingdom. Canada and Sweden are taking part in a study to ascertain whether the use of Black-Berries to transmit real-time health information can boost the treatment of patients with chronic conditions,

Under the study, 120 patients with chronic conditions are using BlackBerries have a set of questions each day to answer, and the answers are transmitted to a computer tracking system that is monitored by a nurse. If patients report symptom changes, the computer system automatically flags the results and alerts a nurse.

Professor Richard Scott, University of Calgary, who is a founding member of the Canadian Society of Telehealth which is conducting the Canadian part of the study, said the use of cell phones and other wireless devices as a supplement to traditional health care is increasing in Canada, and that one of the biggest challenges in the study is to ensure that seniors and those who are unfamiliar with computers can actually use the BlackBerries.

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## A PACS SOLUTION FOR CARDIOLOGY

Hall 15 Booth F41

Just in time for Medica, VISUS has expanded its products portfolio with a PACS solution for cardiology. These and the company's other innovations are now being demonstrated at the fair. Jörg Holstein, CEO of the **Bochum-based** company, summarises the highlights of the new system

With Kardio-PACS, the newest member of our JiveX product family, we are now offering a fully integrated solution, however, currently only or the German market.

Cardiology was an entirely new discipline for us, although our enterprise solution had already covered left ventricular catheterisation. albeit for image distribution only, not for primary diagnostics. Now, we include echocardiography and ECG procedures for diagnostics and documentation. Moreover, there is an integration solution for the cardiological information system (CIS) that is a CIS-PACS interface. CIS in turn, is a module within the hospital information system (HIS). We are convinced that this kind of integration concept will conquer hospitalwide image management just like it did in radiology.



Jörg Holstein

A further highlight we are presenting at Medica is an updated endoscopy solution. We integrated additional functions, such as direct burning of a DVD from the endoscopy video for the patient. In addition, we developed a new diagnostic module for breast cancer screening, which offers graphics-based documentation of the screening result and which automatically controls image logistics to provide one single complete procedure.

#### FDA WORKS WITH OUTDATED IT SYSTEMS

**USA** - Outdated and broken IT systems are blamed for slowness of the Federal Drugs Administration (FDA) reviews of foreign drugs, said former FDA officials and the Government Accountability Office (GAO) during a House **Energy and Commerce Oversight** Investigations Subcommittee hearing. Former FDA regulatory counsel, Benjamin England, said that, although lawmakers were told that the FDA's drug import

broken eight years ago, they still remain broken.

Reports vary on the number of non-US establishments that are subject to FDA inspection; one estimate showed around 3,000; another 6,800, according to Marcia Crosse, GAO's healthcare director.

Former FDA Associate Commissioner William Hubbard pointed out that a relatively small invest-

programmes and IT systems were ment in IT could make oversight more effective.

> In a written testimony for the FDA Commissioner hearing, Andrew von Eschenbach said that upgrading the FDA's IT systems has been one of his top priorities. The agency, he wrote, has created a board to address data accuracy and also that FDA's IT chief is drafting a twoyear plan to modernise the agency's IT infrastructure.

## Starving a tumour A possible new cancer therapy

Every developing tissue is supplied by blood vessels with oxygen and nutrients. Tumours grow far more quickly than normal tissues, so have a greater need of nutrients, which is why tumour cells begin to produce growth factors that stimulate the formation of blood vessels.

If this angiogenesis can be prevented, the tumour starves. However, whilst existing antiangiogenesis drugs eliminate the most important angiogenetic growth factor, they have side effects and also the cancer compensates by producing other growth factors.

Scientists at VIB, the Flanders Institute for Biotechnology, have been investigating the placental growth factor (PLGF) which has been found to only stimulate blood vessel formation in cancer and other diseases, but not in the foetus, young children or pregnant women.

Now, along with the Flanders Institute for Biotechnology and at the Katholieke Universiteit Leuven, the VIB researchers are studying the anticancer action of anti-PLGF, in collaboration with the Flemish biotech company ThromboGenics.

Anti-PLGF appears to be not only

current therapies have failed, but also contributes to the greater effectiveness of existing chemotherapy, without side effects. Thus the substance may form the basis for a new cancer treatment.

Under the direction of Peter Carmeliet, and researchers directed by Désiré Collen at ThromboGenics, VIB researcher Christian Fischer and colleagues have been investigating the therapeutic possibilities of anti-PLGF, which retards the action of PLGF. Anti-PLGF not only increases the effectiveness of chemotherapy and the current anti-angiogenesis therapy, but it also inhibits the growth and metastasis of tumours resistant to existing drugs. In contrast to the current therapies, anti-PLGF does not trigger a 'rescue operation' in which other growth factors are produced as compensation. Another very important consideration is that anti-PLGF induces absolutely no side effects.

In addition to the possibility that anti-PLGF may prove to be a good cancer treatment with less side effects, it could be used for children and pregnant women. New results

successful in tumour treatment where also indicate that anti-PLGF can be used to treat diseases of the eye that lead to blindness.

> ThromboGenics is working on further development of anti-PLGF as a therapy, and hopes to begin the first clinical tests by the end of 2007.

\* Research funding: the EC, ThromboGenics NV and BioInvent, Bristol-Myers-Squibb, German Research Foundation, AACR, EMBO, FWO, Leducq Foundation, Belgian Science Policy, DKH, GOA, IWT and FP-6-Angiostop, and VIB. This research has been conducted by Christian Fischer and colleagues in Peter Carmeliet's 'Functional genomics of cardiovascular and neurovascular biology and disease' research group in the VIB Department of Transgene Technology and Gene Therapy, K.U.Leuven under the direction of Désiré Collen, who is also the CEO of Thrombo-

Scientific publication: The journal 'Cell' (Fischer et al., Anti-PIGF inhibits growth of VEGF(R)- inhibitor resistant tumours without affecting healthy vessels).

Source: Evy Vierstraete of VIB, Flanders Institute for Biotechnology

#### Seeking enterprising distributors

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## Varicose veins NEW



#### **New ablation catheter promises** quicker treatment



**USA** - A next-generation radiofrequency ablation catheter - the VNUS Closure-FASTTM - has been used by surgeon Phillip Levin MD, at Cedars-Sinai, in Los Angeles, California. An expert in VNUS closure procedure, Dr Levin has treated approximately 300 patients since 2003 with the ClosureFASTTM catheter's predecessor, 'The operating time with the new catheter is less than half of what it was with the earlier generation catheter,. Operating time with the previous catheter could take as long as 45 minutes to an hour. The same procedure now takes 15 to 20 minutes to complete and the 98% success rate is the same."

The procedure is made less labour intensive because the new catheter enables surgery on the vein in sevencentimetre segments without having to withdraw and reposition it between segments. Patients usually leave the hospital's out-patient surgery centre on the same day as the operation.

During the procedure, a small catheter is inserted in the saphenous vein via a needle stick under ultrasound guidance. The catheter delivers radiofrequency heat to the vein wall, causing it to shrink and close. Once the vein collapses, blood is re-routed to other healthy veins. Usually, no stitches are needed.

After the new procedure the patient's leg is wrapped in a thick ace-type bandage that should be worn for two to three days. As soon as the patient recovers from the IV sedation, he or she can be discharged from the hospital. Some can return to work the same day - but are pre-warned to avoid running or jumping for about 10 days. Additionally, patients treated with this new procedure have reported minimal pain and bruising.

\* Cedars-Sinai Medical Centre is one of the largest non-profit academic USA for its research activities and is fully accredited by the Association for the Accreditation of Human Research Protection Programs, Inc. (AAHRPP).

Details: http://www.cedars-sinai.edu

Visual analysis of PET scans for non-Hodgkin lymphoma may be improved by using standardised uptake value in monitoring response to treatment, according to research published in the Journal of Nuclear Medicine.

Evaluating a patient's response to chemotherapy for non-Hodgkin lymphoma (NHL) typically involves visual interpretation of scans of cancer tumours. Researchers have found that measuring a quantitative index - one that reflects the reduction of metabolic activity after chemotherapy first begins - adds accurate information about patients' responses to first-line chemotherapy

'We demonstrated that a quantitative assessment of therapeutic response for patients with diffuse large B-cell lymphoma (DLBCL) is more accurate than visual analysis alone when using the radiotracer FDG (fluorodeoxyglucose) with PET scans,' said Michel Meignan, professor of nuclear medicine at Henri Mondor Hospital. in Creteil, France. 'The ability to predict tumour response early in the course of treatment is very valuable clinically. allowing intensification of treatment in those patients who are unlikely to response to first-line chemotherapv.' he added. 'Similarly, treatment could possibly be shortened in those patients who show а favourable response after one or two cycles of chemotherapy, and quantification also may help identify the disease's transformation from low-grade to aggressive stage. 'However, visual interpretation of PET scans will always be the first step of analysis and will prevail in case of difficulties to quantify images.'

Diffuse large B-cell lymphoma is a fast-growing, aggressive form of non-Hodgkin lymphoma, a cancer of the body's lymphatic system. Although there are more than 20 types of NHL, DLBCL is the most common type, making up about 30% of all lymphomas.

Ninety-two patients with DLBCL were studied before and after two cycles of chemotherapy, and tumour response was assessed visually

and by various quantitative parameters, explained the co-author of Early 18F-FDG PET for Prediction of Prognosis in Patients With DLBCL: SUV-Based Assessment Versus Visual Analysis. 'We found that quantification of tumour FDG uptake (the ratio of tissue radioactivity concentration) can markedly improve the accuracy of FDG PET for prediction of patient outcome. Additional studies need to be done,' Prof. Meignan said.

PET is a powerful molecular imaging procedure that uses very small amounts of radioactive materials that are targeted to specific organs, bones

image cancer, a radiopharmaceutical (such as FDG, which includes both a sugar and a radionuclide) is injected into a patient. Cancer cells metabolise sugar at higher rates than normal cells, and the radiopharmaceutical is drawn in higher amounts to cancerous areas. PET scans show where FDG is by tracking the gamma rays given off by the radionuclide tagging the drug and producing 3-D images of their distribution within the body. PET scanning provides information about the body's chemistry, metabolic activity and body function.

or tissues. When PET is used to





'Pushing the immune system to its limits, but it works,' says Samuel Gebert MBA. Dip. Biology, of BioSam, Müllheim, Germany SMARTube technology enables super-stimulation of lymphocytes, which leads to enhanced production of antibodies in vitro. This enables better and earlier detection of infections.

The SMARTube™ unique technology

enables, early and complete HIV/HCV

Antibody detection, by enhancing

HIV and HCV antibody production.

weeks and months from the time of HIV or HCV infection to the time of serum-conversion. Infected yet serum-negative individuals are infectious and their blood transmits the infection to unwary recipients. Infected individuals who are misdiagnosed as negative are a source in spreading the infection further. More complete detection is the key to curtailing the epidemic.

Antibody-based blood tests are independent of the location of the pathogen (virus) in the body, and thus can be positive through the whole course of the infection. In order to use the antibody's powerful diagnostic potential we need to be able to detect the immune potential for making virus specific antibodies, independently of their expression in the body. Stimunology, using the SMARTube, does that. Thus it holds the key to better, more complete, earlier detection of HIV and HCV infections.

Stimunology means pushing the immune system to produce the antibodies that it knows how to

make (by virtue of exposure to the virus) even before they are naturally produced in the body. Stimunology is a proprietary, technology platform.

The SMARTube is a simple to use. cost-effective blood pre-treatment device, for more complete, detection of HIV and HCV carriers. It is not a diagnostic test; it is just a test tube with a proprietary solution in which a small blood sample is incubated prior to testing for the presence of HIV and HCV specific antibodies using commercially available kits (both for screening and for confirmation). The system has

been tested in controlled clinical trials in Israel, China, Mexico and Africa, and has been registered in EU (CE Mark) and in Israel. FDA registration for the USA is commencing.

Am Rotacker 33, 79379 Müllheim www.biosam.eu





## The SMARTube AT A GLANCE

## Israel's life science industry



Where are the most high-tech start-ups? That's an easy one: Silicon Valley. But who comes in a close second? Surprisingly: Israel. Further: Israel ranks Number 1 in terms of availability of scientists and engineers and Number 2 in quality of higher education. The result of this impressive track record is a wide range of successful enterprises and products, particularly related to the life sciences. Some of these products are on show at MEDICA, in the Israel Export & **International Cooperation Institute Pavilion** (Hall 16, Stands E27 and F27). Invited by the Israel (IEICI) and the Ministry of Industry Trade & Labour Foreign Trade Administration our EUROPEAN HOSPITAL representative, Denise Hennig, travelled to Israel to gain a first-hand impression of the country's medical devices industry. Here we highlight some of the products seen during that visit

e-Walk, a wearable quasirobotic suit by Argo enables people with severe walking impairments to stand, walk, climb stairs and generally improve mobility. The product was developed for people with lower limb disabilities caused by spinal cord injury, trauma, brain injury, stroke, cerebral palsy, myelomeningocele, multiple sclerosis, etc. The device comprises a motorised and computerised lightweight brace support suit that can be worn under clothing, thus reducing visibility of the disability. Moreover, the device actively involves the user in walking and in the restoration of other mobility functions through a semirobotic control process. Re-Walk includes multidisciplinary technologies such as motion sensors, sophisticated robotic control algorithms, computers and microprocessors, RT software, acuation motors, rechargeable batteries and composite materials. Details: info@argomedtec.com

Nano Vibronix Inc recently introduced UroShield, designed to stop biofilm developing in urinary catheters - believed to cause catheter-acquired urinary trac infection and be a major factor in the development of antibiotic resistance. The device is also indicated to decrease pain, discomfort and spasm associated with indwelling foley catheter use. Details: Harold@nanovibronix.com

Ultra Rhino-Therm Ltd developed an inhalation device based on the hyperthermia method. The product delivers 100% watersaturated pressurised air at a temperature of 43°C (110°F) directly to the nasal passages via a hand-held tube at a rate of 28 litres of air per minute. Humidified air at that temperature has proved an effective treatment that does not damage the nasal

passages. Treatment takes only 15 to 30 minutes and can be combined with medication if necessary

Details: www.rhinotherm.com

Flow Medic offers a non-invasive, portable solution to prevent peripheral arterial diseases (PAD) and deep vein thrombosis (DVT) for use in hospital or at home. The system improves the blood circulation in the lower extremities to help prevent and

reduce complications caused by poor circulation. Details: www.flowmedic.com

**Endo-PAT 2000** by Itamar Medical offers important support to cardiology patients by enabling physicians to reliably and noninvasively measure endothelial function and identify pathological cases of dysfunction. The PAT signal is recorded via Itamar Medical's non-invasive pneumatic finger probe. The collected data











#### David Furst, Director the IEICI with European Hospital representative Denise Hennig

The mission of the IEICI is to promote trade, joint-ventures and strategic alliances between overseas and Israeli companies. To advance the integration of Israeli companies into the global market and search for, locate and generate business opportunities for Israeli companies, the IEICI is working with a world wide network of specialists. The IEICI is divided into several sub-groups, one which is responsible for the life science sector that consists of the sections medical devices, biotechnology, pharmaceuticals, healthcare IT and healthcare services and nanotechnology.

are analyzed automatically using proprietary advanced digital signal processing algorithms and the results are available within seconds after the test.

Details: www.itamar-medical.com

InSightec presents an interesting development for non-invasive surgery: ExAblate 200 is a focused ultrasound ablation system that unleashes the therapeutic potential of ultrasound for non-invasive surgery by integrating focused ultrasound with the precise visualisation, guidance and monitoring of MR imaging. Details: www.insightec.com

**SMARTube** offers earlier, better detection of HIV and HCV by applying a simple and costeffective blood pre-treatment before the blood is tested with the common test kits, its manufacturer says. The technology involves in-vitro activation of HIV and/or HCV primed lymphocytes, triggering antibody production even during active suppression - the window period - when the infection usually cannot be detected. Just a week after the infection date, SMARTube is said to detect the HIV and HCV antibodies.

Details: www.smartube-bio.com

BreathID system – flagship product of Exalenz – extracts vital diagnostic information from subtle changes in a patient's exhaled breath. The firm reports that it provides accurate and non-invasive assessment and monitoring of functional diseases of the liver and the gastrointestinal tract.

Details: www.breathid.com

Medispec, which specialises in high performance shock wave therapy products for use in urology, cardiology, orthopaedics, physiotherapy and thermotherapy applications. The firm believes its product *Cardiospec* could be a future alternative in the treatment of cardiology patients since the non-invasive cardiac angiogenesis shock wave therapy increases perfusion and exercise tolerance in end-stage CAD patients.

Details: www.medispec.com

**Cuprom Inc** has introduced an innovative textile to kill germs and viruses, with promising uses for masks and clothing used in medical care.

Details: www.cupron.com

**Paltechnica** manufactures several storing devices for CT or MR systems. These accessories have been developed in partnership with the manufactures of such systems to match their design and function. Details: www.paltechnica.co.il









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### New stereotaxis cath lab opens in London

The new £2 million remote access stereotaxis catheter laboratory at London's Heart Hospital, funded by the British Heart Foundation (BHF), is the first of its kind in the UK and one of only 40 worldwide.

The lab will enable doctors to perform angioplasty on patients at much higher risk of coronary artery disease and heart failure than previously possible at the hospital.

In traditional labs, the cardiologist stands next to the patient manually 'pushing' the catheter around the body. The new lab uses magnetic technology similar to an MRI scanner, and magnetic tipped catheters or probes are 'pulled' around veins and arteries by giant magnets operated with a joystick in a control room next to the theatre, allowing pinpoint precision.

Professor William McKenna, clinical director of the Heart Hospital, said: 'Currently, during complex electrophysiology and device procedures, it may take several hours to position the catheters. The new stereotaxis equipment will greatly improve our efficacy in such cases and be better for both patients and staff.'

#### Benefits include:

- As a result of quicker treatments (a 25% reduction in procedure time for complex electrophysiology ablation) patients are exposed to less radiation.
- Fewer members of staff are needed to support procedures, and those who are will be exposed to less radiation because they work outside the equipment room.
- Because treatments are less invasive, hospital stays are briefer.
- Recovery times are also said to be quicker, and some cardiac patients have a better chance of cure.

## Cardiology roundup

## World renowned Centre of excellence halts heart transplants

Heart transplants are inherently high-risk, complex and gruelling procedures performed on a small number of patients in a 'last ditch' attempt to save already weakened lives. Therefore, success in this area is still celebrated.

Pending an investigation into why mortality had risen to three times the national average among some patients undergoing heart transplants, this procedure has been suspended at the renowned Papworth Hospital NHS Trust, near Cambridge, a National Health Service (NHS) hospital, where about 1,500 heart transplants have been carried out since 1979. The hospital is only one of five hospitals that carry out heart transplants. It gained international recognition largely due to the pioneering work of world-renowned cardiac surgeon Professor Sir Magdi Yacoub, now retired but highly active on the world's cardiology stage

The Trust itself raised the alarm itself after a routine audit showed that, since the beginning of this year, seven out of 20 patients who had received a heart transplant died within 30 days of the procedure in the first ten months of this year. On average, only 10% of patients would be expected to die within that period. However, as Steve Bridge, the hospital's CEO, pointed out: 'We've been around 7%, so we are below the national average. We are talking comparatively small numbers but it was agreed it would be sensible for us to invite the Healthcare Commission to undertake an external review. If there are any improvements we will make them.

The UK's Department of Health asked the Healthcare Commission, the NHS 'watchdog', to carry out a preliminary review.

Papworth employs 10 surgeons. Data on the dial At the time of going to press, their those with small b

#### From Brenda Marsh in the UK



records are being 'closely examined' and the results of the review, due in mid-November, are to be sent to the UK's Chief Medical Officer.

Lung transplants and other cardiac procedures, including bypass surgery, will continue.

### **Proposed ban on drug-eluting stents**

Angry cardiologists enter NICE discussions

Doctors are outraged by a proposal to ban the use of drug eluting stents (DES) currently used to treat some 30,000 patients annually – about 50% of all stent procedures – because the country's National Health Service (NHS) has been advised by the National Institute for Health and Clinical Excellence (NICE) that drug eluting stents are not cost-effective.

Bare metal stents are about half the price of drug coated stents, which nowadays cost about £600.

Cardiologists have pointed out that diabetic patients or those with small blood vessels are more likely to suffer restenosis of arteries if given a bare metal device instead of the other. It could lead to a second operation and even a more expensive bypass.

Research in *The Lancet* medical journal has presented fresh evidence that using DES is not only cost-effective for high-risk patients, but also could save costs. In the study Swiss investigators carried out an 18-month observation of over 800 patients; two-thirds receiving DES; the rest, a bare metal stent.

Data on the diabetics involved, or those with small blood vessels,

showed a 50% reduction in serious cardiac events, including second operations and heart attack, in those who received a DES. In addition, the death rate was lower in the DES group.

Overall, the researchers conclude that giving drug-coated devices to all heart patients is not cost-effective. But targeting the devices at high-risk patients is good value for money, the study concluded.

Not to be ignored: The researchers' calculations for costeffectiveness were similar to those used by NICE.

Cardiologists have estimated that at least 12,000 of patients given bare metal stents would need open heart bypass surgery in the future, due to the mentioned conditions, for example. They argue that bypass surgery is not only more expensive, but that the NHS could not cope with an estimated 50% rise in operations for patients unable to have stent procedures.

Professor Tony Gershlick, of the British Cardiovascular Intervention Society which opposes the ban, said the study confirmed what doctors had been saying to NICE: 'We've never used drug-eluting stents for all patients and that isn't what we're calling for. Under current guidance, they are used in high-risk patients and this study shows they work well and are costeffective because there is a 50% reduction in repeat procedures. Paying a small amount extra, which amounts to around £300 for each drug-eluting stent, is worthwhile for these patients.' He also believes that NICE used out-of-date costing for drug- eluting stents, an early cost of £900 each. In addition, Nice had used only an audit from one hospital.

According to the BCIS, the proposed ban could cost the NHS an extra £60 million annually in surgery and re-stenting.

NICE is now discussing the ban, and a decision is expected before Christmas.

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### From the American Heart Association 2007 meeting

#### **Sudden cardiac arrest**

Poster data presented at Scientific Sessions 2007 have demonstrated that the application of clinical practice modifications, combined with advanced electronic technologies, can improve the care of patients at risk for sudden cardiac arrest (SCA). Recognition of at-risk patients improved from a baseline of 24% to 70% at regional clinics not using the process, and to 93% at the main clinic applying this process and technology.

The aim of this prospective, single centre study, sponsored by Medtronic, Inc, was to compare the effect of specific clinical practice processes and tools on the ability of clinicians to recognise patients at risk for SCA and apply the appropriate treatment guidelines for those patients.

The clinic staff was trained to use a new process to better identify at-risk patients. This included:

 A patent-pending clinical decision support tool for Electronic Patient



Record (EPR) systems that automatically identifies at risk patients and continues tracking the patients who did not immediately qualify for implantable cardioverterdefibrillator (ICD) therapy

- A standardised patient education system and education video
- Broad operational and workflow changes

The clinical practice process included optimal medical treatment prior to an implantable cardioverter-defibrillator (ICD), temporary and absolute physician exclusions for ICD therapy, and is based on current AHA/American College of Cardiology (ACC) and the Centres for Medicare and Medicaid Services (CMS) guidelines with practice-specific requirements. An independent review of medical charts for all patients visiting the main clinic variability (the group utilising the new process) process of our patients, and independent review of medical charts for all patients visiting the main clinic variability (the group utilising the new process)

and regional clinics (those that did not use the process) was conducted over a two-month period. Patients were followed for six months.

'A recent report shows that it takes 10 to 15 years for new advances in medicine to be adopted into clinical practice,' said William Daniel, M.D., clinical director at Cardiovascular Consultants, P.C., and medical director of Quality and medical director of Inpatient Services at Mid America Heart Institute, Kansas City. 'Recognising this time lag, and the fact that there are thousands of pages of guidelines for caring for our cardiac patients, the study illustrated that the use of our electronic solution and process changes helped to give physicians the right information at the right time, and allowed them to use their judgment and be extremely accurate in making appropriate treatment decisions. Further, every patient, regardless of age, gender or race, receives the same high quality of care, since the process reduces variability and physician reliance on



## Safer hygiene with silver-based products

**UK** – Results from a National Health Service (NHS) trial, which investigated the effectiveness of silver at reducing levels of bacteria in an actual hospital setting, have been announced by BioCote Ltd, manufacturer of antimicrobial products.

'The environmental trial compared two outpatient wards at the Heart of England NHS Foundation Trust. One facility contained furniture and equipment with BioCote antimicrobial protection and one contained standard, untreated items. The products tested in the trials included blinds, tiles, door handles, sack holders and light switches,' the company reports. 'The results showed a 95.8% reduction in bacteria in the hospital environment that contained BioCote protected products, compared with a standard ward, with no BioCote present. There was also a 92.6% reduction in bacteria on the surfaces of BioCote protected products, compared with non-protected products in the same facility.'

BioCote concludes: 'The study proves that using silver-based products in a hospital environment can lead to a reduction in bacterial colonisation, resulting in more hygienic and safer surroundings for patients.'



**WOUND MANAGEMENT** 

## **Tissue adhesive** not sutures

Germany - Rather than the time consuming procedure of suturing a wound, Epiglu simply needs adapting to size then application. The product's manufacturer, Meyer-Haake GmbH, reports: 'With Epiglu fresh surgical wounds, lacerations and cuts can be closed quickly,

infection-proof, atraumatically and without the need for anaesthetics.' Wounds treated with Epiglu heal fast, without complications, with minimal scar formation and rare development of keloids, the company





For full information. visit Meyer-Haake's stand at MEDICA, in Hall 5 - P21

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## **Benchtop** ultrasonic cleaning

UK - A new range of benchtop ultrasonic cleaners are being launched at MEDICA by manufacturer Ultrawave. 'The Q-Series is the first brand new range of benchtop baths from Ultrawave in a number of years and the collection of seven cleaners provides improved cleaning efficacy and maximises operator easeof-use,' the company reports.

The range uses Frequency Leap cleaning technology to provide a homogenous cleaning action throughout the whole tank, ensuring that surgical instruments are consistently and effective cleaned cycle after cycle, Ultrawave points out. 'Recognising market demand for cleaning cycle traceability, each Q-Series cleaner has an SD card slot which allows validation of each cleaning cycle to be easily and transferred to and stored on a PC. The cleaning process is easily managed by the software driven menu and LCD control panel.' These new ultrasonic cleaners can be viewed in Hall 16,



## HYGIENE SPORES SIMPLY WIPED OUT

Gama Healthcare has developed an advanced innovative wipe -Clinell Sporicidal - which, the company reports, is the world's first peracetic acid generating wipe specifically designed to deal with spores. The wipe was developed by a team of medical doctors and contains patent pending technology designed around the stability of the peracetic acid, the company adds.

'Clinell Sporicidal offers an easier and much safer option than the chemicals currently recommended to deal with spores such as Chlorine and Glutaraldehyde based compounds. The wipe is activated with the simple addition of water, which produces peracetic acid instantaneously to levels which are proven to kill all

known germs. Peracetic acid works extremely well in dirty conditions (unlike Chlorine) and can be used directly on fresh blood spills, which will activate the wipe immediately without the need for water. The fumes produced are non-toxic, which allows for use in close proximity to patients. The breakdown products are environmentally friendly and contain no alcohol or organic solvents.

'Clinell Sporicidal is the most powerful wipe to ever be created and its development constitutes a major advancement in wipe technology and infection control. In addition, it is set to become the gold standard for dealing with spore outbreaks in hospitals and healthcare institutions across the world.'



#### MR Diagnostics Incubator System nomag™ IC

#### Optimal Diagnosis for Successful Therapy

The MR Diagnostics Incubator System nomag™ IC offers the solution for a large, so far not solved problem: With the incubator system pre and term born babies can be examined for the first time after birth by optimal non invasive diagnostics in the magnetic resonance imaging.

The nomag™ IC system facilitates a safe transport from the NICU to the MRI department with MR compatible trolley and MR compatible gas and power supply.

Features:

- Delivers climate as demanded by NICU incubators
- Dedicated neonatal head coil
- Upgradable with body coil, integrated monitoring, ambulance trolley and MR compatible ventilation



A novel IP-based nurse-call system is being demonstrated at Medica by Finland's Emfit Ltd\*. This system inte-

grates common patient peer-button and nurse-present/nurse-needs-assistance buttons with bed multi-patient, under-mattress technology senses and calclonic seizures, from below

monitoring that uses a long-use sensor. Emfit reports. 'New DVM (discreet vitals monitoring) culates patient approximate pulse and respiration rates, as well as movement activity and even epileptic tonicthe mattress. The system

uses standard IP protocol to connect to LAN, and can be used for adults and children.'

and respiration movements and generates a respective output voltage sig-

nal. The digital signal data acquisition unit uses Emfit's patent pending algorithms in calculating heart and respiration rates, strengths, and movement activity from the sensor signal.

The system alerts the nurse with various userpreset parameters; for example when a patient pushes the bedside peer-button, leaves the bed, or has a seizure with muscle jerking that lasts over a preset time. It is also possible to generate several other types of alerts in the computer software, which also records

and visualises the vital signs and

## **Nursing monitors**

#### IP-based nurse call system provides non-body-contact vital signs monitoring as well as patient movements, a fall and epileptic seizure

Emfit's DVM (discreet vitals monitoring) technology measures basic physiological parameters (pulse rate, respiration, movements) passively, from below the patient's mattress, without the use of electrodes, leads, cuffs or cannula, the company points out. This versatile system can be used for various notifications, monitoring and vitals trend tracking needs in establishments such as hospitals and for the care of retarded people, the elderly and mental patients, Emfit reports. Besides input for Emfit's dynamic, thinfilm under-mattress sensor, system has inputs for patient-peer-button, equipment with dry-contact output, and nurse-present/nurse-needs-assistance buttons.

The DVM system makes most of the calculus of different measurement parameters and events via the embedded electronics at the bedside and thus produces a minimal amount of data in order not to load the LAN or the server

Heart and respiration strengths, rates, movement activity and various alarms and nurse acknowledgements are logged and stored in the server. This allows tracking vitals and movement activity trends over long period of time.

DVM technology consists of Emfit's proprietary, patented dynamic thin film sensor, installed below mattress, and a digital signal control unit interfaced with LAN. The self-biased sensor responds to small pressure changes caused by patients BCG (ballistocardiogram) motions. The system can alarm for example of a too low motion activity, to prevent possible bedsore, Emfit adds.

cept in 2003. The most challenging job was to develop the algorithms to accurately calculate the pulse and respiration rates in real time from our under-mattress-installed, dynamic, thin film sensor. Also the software solution to control multiple beds and transfer alarms to nurses via new thin-client type displays

'We started to develop this product con-

was challenging. During the years of development, the easier parts were complementing the bedside device with patient and nurse buttons. Our goal was to develop a whole new concept for care environments of multiple low-risk patients, and use standard LAN and WLAN infrastructure; a new-age nurse call system with assisting non-diagnostic monitoring. However, the intended use of our product is not monitoring of vital physiological parameters, where the nature of variations is such that it could result in immediate danger to the patient. We see a big potential for this product in hospitals and care of the patients who are elderly, retarded or mental cases,' said Heikki Räisänen, CEO of Emfit.

\* Founded in 1990, and located in Finland, Germany and the USA, the company reports that it is the world's leading ferroelectret sensors and related embedded sensor systems manufacturer.

Details: Telephone +358-14-332 9000 Mobile: +358-500-678767 (CEO Heikki Raisanen) Email: heikki.raisanen@emfit.com. www.emfit.com

IP-based Nurse Call System with Fall Alarm and



#### Hall 12 Booth A63 **Scales to fit all** patients and needs

The Hamburg-based company seca has specialized in the manufacture of weighing and height measuring scales for over 165 years. Today, the firm has locations in Switzerland, the UK, France, Japan, China, Mexico and the USA, and manufactures products in Germany, the Czech Republic and China, and exports its range of products - which include infant, column and flat scales, with height measuring scales, as well as chair, wheelchair and bed scales – to 110 countries.

At Medica, seca products can be seen in Hall 12 Booth A63.

As an example of the need for accuracy in scales used for patient care, seca points to the importance of body weight in diabetes therapy:

More than 10 million people in Europe have Diabetes mellitus and 90% of these suffer Type 2 diabetes. An increasing number of young adults, and even children, are becoming affected by this so-called

adult-onset diabetes.

Body weight plays an important part in the prevention and treatment of this type of diabetes: More than 90% of all Type 2 diabetics are overweight. On the one hand, excess weight combined with the wrong diet and a lack of exercise promotes the development of the disease. On the other, any reduction in weight makes a positive impact on the course of the disease. A weight loss of just 5% to 10% has a positive impact on the medication. However, it is also known that overweight Type 2 diabetics find it harder to lose weight than overweight people who are not suffering from the disease. Moreover, some medical treatment, such as the administration of insulin, can promote weight gain.

Therefore, controlling a patient's weight must be an integral part of any diabetes therapy, right from the start. Precise and reliable results are required - sensitive scales that register the slightest change - and therefore loss - in weight can show up success quickly and help to motivate patients. Therefore, doctors and nurses should use userfriendly scales with high functionality, which deliver fast and accurate results. seca, which manufactures multi-function scales, says their products meet these demands and can be used to accurately weigh very overweight patients as well as they have a capacity of up to 300 kg. Moreover, these scales show weight in graduations of 100g up to 200kg and 200g thereafter. The slightest changes in weight are therefore precisely indicated.

If diabetes therapy is carried out in conjunction with a controlled diet, which includes the weighing of meals or even individual ingredients, then the diet- and kitchen scales seca culina 852 - are the right product for the job.





button.

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Our other publications

## **Meet our team at MEDICA!**

#### **EH@MEDICA** — Here we are again, at the greatest medical show on earth

As the official show publication, EH@MEDICA has been produced in three separate issues by our flagship magazine EUROPEAN HOSPITAL (EH), Each issue is packed with technological and medical innovations as well as news of medical and healthcare advances.

- On Wednesday the issue focuses on ultrasound
- In the *Thursday* issue we present progress in hospital IT systems
- Friday's focus is on news surgical procedures and equipment

The European Hospital team is at the fair (hall 7, booth E15), all looking forward to meeting you, to hand out free issues if you missed any, and to answer your queries regarding editorials or advertising. Our reporters are also circulating around MEDICA to catch the most interesting highlights of the fair and report about these. Their onthe-spot reports will appear, for the first time, on our homepage www.european-hospital.com in a special MEDICA section. So, even if you must miss the fair, you can access daily news to keep up-to-date.

In addition, because the world-wide-web and e-mail communications have increased in importance. European Hospital is launching a new, online newsletter, so you can receive selected medical news directly in your own e-address! (For subscription details, please visit our website!)

Along with our main medical and healthcare publications and related activities, European Hospital is again organising the Hospital Manager

Symposium 2008, in tandem with the European Congress of Radiology (ECR). In 2007, the

Symposium attracted over 300 radiologists to hear talks and lectures given by our selected international experts in Finance, IT and Management.



Also, at this year's ECR, we launched our latest publication: The *RADBOOK*, the first guide for radiology equipment in the English language. EH will continue the successful publication of this valuable source of information for those who must make decisions on purchasing new systems for their hospitals and

We have also expanded our pan-European readership to Russia, by publishing, within our prestigious journal European Hospital, several special issues, as well as additional pages in the Russian language – a great success. In addition, we will publish, for the first time, a special issue for the most important Russian medical fair – *Zdravo* 

(Zdravookhraneniye 2007).

CARDIOLOGY EUROPEAN HOSPITAL It's ESC time again! MRI and the diagnosis of arteriosclerosis and

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Hall 7 Booth E15

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**EH fair activities** 

Europe: MEDICA and the ECR USA: The RSNA, in Chicago





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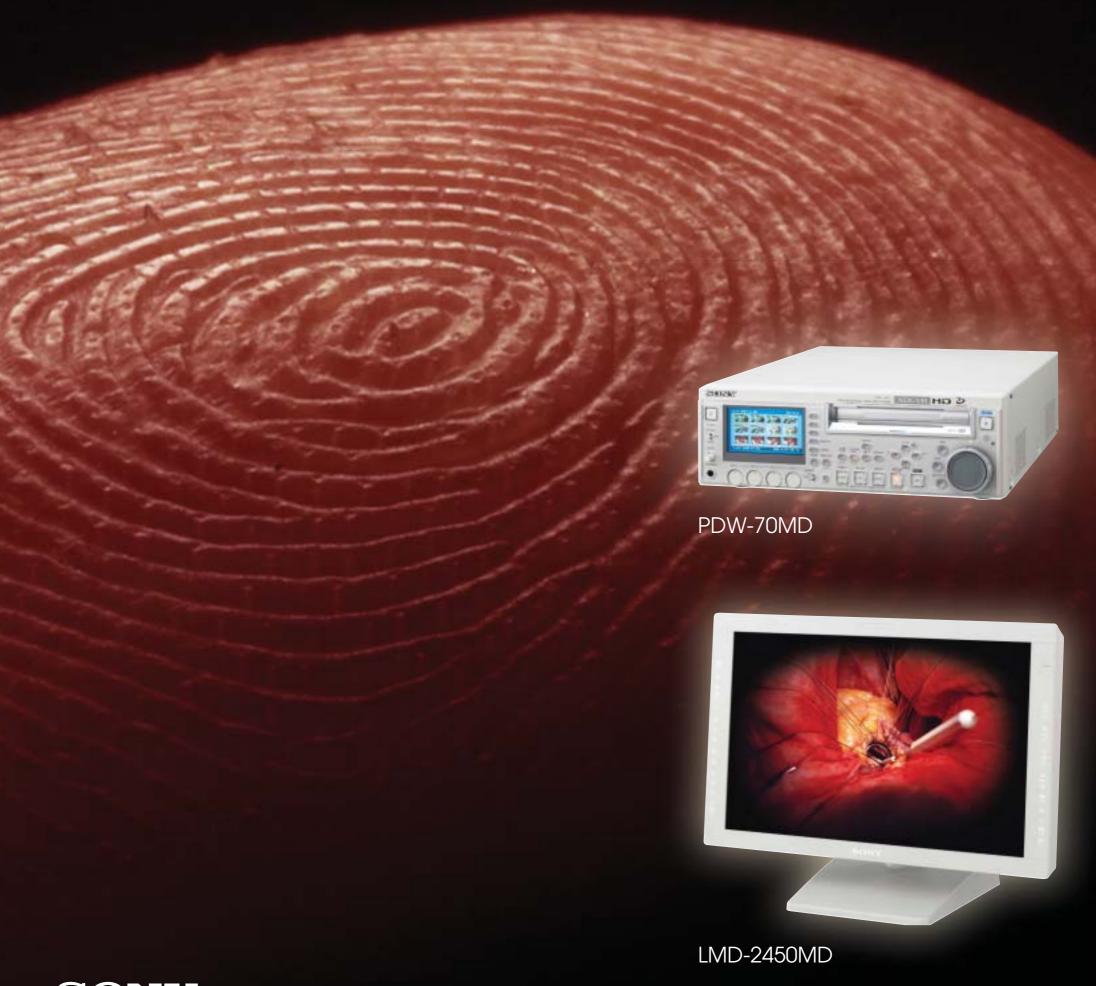
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