An overview of the Siemens highlights at Medica 2007

Under the motto “Broadening Perspectives. Increasing Performance.” Siemens Medical Solutions introduces its comprehensive portfolio for health care at Medica 2007 – from prevention to early detection and diagnosis to therapy and subsequent care. Siemens offers performance-oriented products, solutions, and services that support hospitals and medical practices in their effort to increase the quality of healthcare and reduce costs at the same time. The new systems shown by Siemens at the Dusseldorf exhibition include magnetic resonance tomographs Magnetom Essenza and Magnetom Verio, the Ultrasound system Acuson P10 - barely larger than a Blackberry- for emergency medicine as well as the X-ray system Ysio Wireless Detector The exhibits for the syngo and Soarian software systems will provide visitors with the opportunity of viewing information technologies and their support that enables the display, automatization, and optimization of highly complex workflows in hospitals and private practices. At Medica 2007, for the first time Siemens will be showing the i.s.h.med product line. This system was developed by Siemens Medical Solutions GSD, one of leading supplier of hospital information systems.
Magnetic resonance tomography with continuous table move: syngo TimCT enjoys its first round of success

Siemens innovation syngo TimCT, a software and hardware technology for magnetic resonance tomography (MRT), allows the patient to be scanned in one session from head to toe, similar to computed tomography. During the acquisition, the table moves continuously through the magnet. The advantages: faster scans, better image quality, and new clinical applications. Since the start of the system’s delivery in July 2007, syngo TimCT has enjoyed great popularity with customers. As explained by Dr. Jörg Barkhausen, managing senior physician and acting head of the institution at the University Hospital Essen: “The workflow was greatly simplified. Previously we needed up to twelve work steps from patient positioning on the MR table to data acquisition, today we just need six.” syngo TimCT is available for such 1.5 Tesla systems as Magnetom Avanto, Magnetom Espree, and Magnetom Symphony – A Tim system – as well as 3 Tesla systems, namely Magnetom Trio – A Tim system – and Magnetom Verio

Computed Tomography: vascular analysis via the Internet with syngo WebSpace

syngo WebSpace, the client server solution for computed tomography (CT) by Siemens Medical Solutions has been expanded to include new functions for vascular analysis. CT images can be selected and processed via the Internet or other network connections using syngo WebSpace. Improved algorithms and additional tools integrated in the new software version enable the physician to accurately analyze small vessels and document findings more quickly. For example, this new software enables computer-supported stenosis measurements and the comparison of vessel cross-sections.

Immunoassay: „Dimension Vista“, the integrated Chemistry system

Dimension Vista is the first in a new class of intelligent lab systems for the clinical laboratory where customer-driven design, ultra-integration of four best-in-class technologies and onboard automation come together for the heightened standards of efficiency, simplicity, sensitivity and convenience. Ultra-integration combines photometry, nephelometry, V-LYTE electrolyte detection, and LOCI advanced chemiluminiscence. The Dimension Vista 3000T
Intelligent Lab System processes up to 3000 tests per hour or up to 400 samples per hour and is a dual system with built-in active back-up that serves as a single smart workstation.

**Fluoroscopy and angiography – virtual simulation of real systems**

Visitors interested in fluoroscopy and angiography can test two systems in simulation: Axiom Luminos dRF, a fluoroscopy system that combines both fluoroscopy and radiography as well as high system utilization, as well as Axiom Artis, a system family using flat detector technology for examining vessels and the heart. The user controls the systems displayed on a monitor via original operator consoles. All movements initiated at the consoles, including the associated noises, are displayed in real time on the monitor.

**PET-CT: High-Definition PET by Siemens adds a new measure to image sharpness**

By introducing high-resolution positron emission tomography (high definition PET, HD•PET) for PET-Computed Tomographs (PET-CT), Siemens Medical Solutions redefined the quality of molecular imaging. It is making its mark as the only high-resolution PET technology worldwide that ensures greater image sharpness and clarity throughout the entire field of view. The sharpness of HD•PET translates into greater specificity and accuracy. The physician can limit small lesions more securely –including those in the lymph nodes, the abdomen, in the head and neck region as well as in the brain. As a result, the system allows for earlier and more targeted treatment sessions. HD•PET builds on the TruePoint technology of Siemens, a unique combination of technical characteristics and workflow solutions for PET-CT imaging that are to optimize patient diagnosis, treatment and care. The first high definition -PET•CT worldwide was introduced in the US in the beginning of June 2007.

**Siemens Medical Solutions GSD: Performance-oriented distribution of results through the new COra add-on**

At Medica 2007, Siemens Medical Solutions GSD introduced its new “COra” software module. Today hospitals no longer accept that the department discharging the patient is credited with the entire revenue of a case. Co-treating departments refer to their costs incurred and demand their share of revenue commensurate with their services rendered.
COra performs profit center calculations or defines department-specific contributing margin. The module presents revenues allocated to the individual department depending on performances rendered. Parameters for the calculation are internal relocations, intensive care, operations and additional remunerations. COra is especially suitable for hospitals that use SAP R/3 CO module for reporting purposes.

IT in the hospital, role-based access to RIS and PACS with syngo Portal
The syngo Portal solution supports an efficient workflow for diagnostic and administrative processes in the radiology department. The “Portal Radiologist” provides the radiologist with role-based relevant work lists, images, reports and additional clinical information. By using “syngo Portal Referring Physician”, a referring physician is able to get in touch with the hospital or a radiological group and comfortably book an appointment for his patient on his computer. Via the same portal, he receives the results of the examination immediately after the radiologist completed the report.

Integrated Care Solutions: Soarian Integrated Care with electronic patient record
Soarian Integrated Care is a web-based eHealth solution by Siemens Medical Solutions that uses a dedicated network to communicate patient-related data, forms, and documents among partners. Recently, the electronic patient record (EPA) was implemented as a "WebEPA" at the Rhön-Klinikum AG. Presenting an acute cardiac case as an example, Siemens also demonstrates the exchange of data between the patient record and the system components as well as a physician’s management system at the exhibition. In addition, visitors are able to learn about “electronic case records” and the national diabetes screening program in Scotland.

Identity Solutions: Security infrastructures in healthcare
In the area of IT security in healthcare, Siemens scores at the top with a wide-ranging portfolio. Examples are security solutions based on smart cards, identity and access management as well as solutions for network and system security. At the Medica, Siemens demonstrates the IT architecture implemented by the company at the Mt. Sinai Hospital in New York. Smart cards allow for access to medical information and help avoid incorrect
treatments that may be triggered by wrong or missing patient data. In addition, Siemens shows the integration of a connector with a physician’s management system and a pharmacy management system. The connector is the interface between information systems in the hospital and central telematics services. It enables, for example, electronic batch signatures for prescriptions as well as encrypted communication of the participating components.

Life – The Customer Care Program of Siemens Medical Solutions

"Life" is the name of the customer care program of Siemens Medical Solutions. It includes a continuing education program with courses covering almost all modalities. These courses are either offered on-site or as e-learning in German and English. But Life also offers courses for customers who want optimal use of their investments today and obtain maximum results. To this end, Siemens is offering different after-sale programs and services, for example, services to maximize productivity or access to new technological developments. Among these is Guardian Program, a real-time monitoring program that prevents potential malfunctions.

Consulting for hospitals and medical practices

True to its name, Siemens Healthcare Consulting specializes in services to future-oriented providers in the healthcare sector. The interdisciplinary team supports hospitals and healthcare centers in the areas of strategy and management, during clinical process consultation, as well as during technology and infrastructure planning. Whether it is directed to individual establishments or to workflow improvements and increases in efficiency across sectors along the entire care continuum, Siemens consultants help their customers to adjust to the changes in requirements for healthcare. A good example is the University Clinic in Erlangen. With the support of Siemens, clinical paths were implemented that reduced the average hospital stay by close to 46 percent.

New environmental Siemens concepts for medical engineering systems

To reuse pre-owned systems as much as possible is an important component of the company’s philosophy. Resources are conserved by extending the life cycle of a product.
For example, computed and magnetic resonance tomographs, ultrasound, radiation therapy and radiography systems are accepted back by Med and reconditioned by the Refurbished Systems division. For this purpose, an extensive five-level quality process was developed (system selection, qualified disassembly, refurbishing process, installation, liability for material defects) that matches the same high quality standards for new systems. Through this integrated approach, a yearly discharge of 10000 tons of CO₂ is eliminated. These energy savings correspond to the yearly electrical energy demands of 3,000 3 person households.

**Siemens Medical Solutions** is one of the world's largest suppliers to the healthcare industry. The company is a renowned medical solutions provider with core competence and innovative strength in diagnostic and therapeutic technologies as well as in knowledge engineering, including information technology and system integration. With its laboratory diagnostics acquisitions, Siemens Medical Solutions will be the first fully integrated diagnostics company, bringing together imaging and lab diagnostics, therapy, and healthcare information technology solutions, supplemented by consulting and support services. The company is a single-source provider of solutions across the entire continuum of care -- from prevention and early detection, to diagnosis, therapy and care. Siemens Medical Solutions employs more than 48,000 people worldwide and operates in 130 countries. According to U.S. GAAP, in the fiscal year 2007 (until Sept. 30th) Siemens Medical Solutions reported sales of 9,85 billion €, orders of 10,27 billion €, and group profit of 1,32 billion € (preliminary figures, unaudited).

Further information can be found by visiting [http://www.siemens.com/medical](http://www.siemens.com/medical).