



**Healthcare-IT
Quarterly Analysis
(Second Quarter)**



June 2004

Let Us Tek You To The Future

www.tekplus.com



Every care is taken to ensure that all contents of this report are accurate and opinions stated are based on information and sources we believe are reliable, but are not guaranteed. No liability can be accepted by TekPlus Limited, its directors, employees, or authors for any loss incurred as a result of using or failing to use anything contained in the report, conclusions stated or inferred.

Copyright

Purchase of this report does not entitle you to copy or reproduce it, or any part of it, in any way. This report is the copyright of TekPlus Limited. If you wish to copy or reproduce the whole or any part of this report then you must seek written permission from TekPlus Limited. You can apply to do this by writing to TekPlus Limited, the address is shown below.

This study (Ref: TP0215R04V01) provides brief look on activities in the Healthcare-IT Market in the second quarter as well as TekPlus' analysis on major announcements. Please follow the licence conditions agreed during the original sale, as any breach of the terms of sale will constitute an illegal act. Please make sure that if you have a single site licence you do not send this issue to other sites or any third party.

TekPlus is a registered trademark of TekPlus limited.

TekPlus Limited
12th Floor York House
Empire Way, Wembley
Middlesex, HA9 0PA
United Kingdom

Tel: (44) 208 795 4500

Fax: (44) 208 795 5800

www.tekplus.com

info@tekplus.com

Table of Contents

| | |
|--|----------|
| QUARTERLY ANALYSIS – SECOND QUARTER..... | 4 |
| MAJOR TEK..... | 4 |
| <i>Land of opportunities – Philips in China</i> | <i>4</i> |
| <i>UK PACS Contracts</i> | <i>5</i> |
| <i>Increasing importance of IT in Primary care sector.....</i> | <i>6</i> |
| HIS RELATED NEWS..... | 7 |
| PACS RELATED NEWS | 8 |
| OTHER SIGNIFICANT HIT RELATED NEWS..... | 10 |
| SIGNIFICANT SOLUTION NEWS | 12 |

Quarterly Analysis – Second Quarter

Major Tek

Land of opportunities – Philips in China

China has become a hot target for healthcare-IT vendors and many of them are successfully invading the market. The latest development on the China front has been the activities of Philips Medical. In June 2004, Philips launched a joint venture with China Neusoft Group under the name of Philips and Neusoft Medical Systems Co., Ltd. Philips hold 51 percent of the capital share and the Neusoft Digital Medical Company holds 49 percent.

The partnership will bring benefits to both the partners (though the scale looks more tilted towards Philips) – Neusoft will benefit from Philips' advanced technologies, skills and an international brand name. Philips in turn will have tremendous opportunities ranging from obtaining a better market positioning (with local know-how) to longer-term supply of a skilled workforce at a competitive price. It will provide Philips with better competency (in terms of cost) for economical to mid-range products. Having a base in China will also help Philips to better serve the Asia-Pacific markets. Philips and Neusoft Medical Systems Co. Ltd. plan to start with developing and manufacturing computed tomography (CT), MR, Ultrasound and x-ray equipment.

Business activities in china are expected to double in next five years with continuous strong growth in the Chinese economy (~8 percent Yr/Yr). The Chinese government has already increased their investment in the medical equipments market (approximate 13 percent annually). By 2006, the medical market is expected to experience a growth of \$1.7 billion (about 10% annual growth until 2006). Currently China is the world's third largest medical market following the US and Japan. However, it is expected to overtake Japan in the next five to ten years and will become the world's second largest medical market. In such a scenario, China presents great opportunities not only for Philips but for other vendors too. In 2003, Philips was already one of the largest foreign investors in China with a staff of approximately 18,000 employees and over 1000 research and development personnel. With this joint venture, Philips expects to double its business activities in China to over €12 billion.

UK PACS Contracts

The UK Department of Health has decided to provide every NHS trust hospital in England with PACS within the next three years as part of a £10.6 billion National Programme for IT (NPfIT). The roll out of PACS will start this summer through five LSPs.

Currently 25 acute trusts already have PACS and 178 acute trusts will have PACS solution through the NPfIT program. The goal is to complete the PACS installation in three years (by the end of 2007) with 80 percent completion in the first two years and the remaining 20 percent will be completed by the end of the third year.

Initially a central investment of £60 million will be made available this year followed by further future funds (for subsequent years) yet to be announced. The shortfall in meeting the costs of buying and locally implementing PACS systems will have to be met by each local NHS trusts.

In May 2004, these PACS contracts were awarded to GE Healthcare, Philips Medical Systems, Kodak Health Imaging and ComMedica. GE is the biggest winner with the "right" to be a PACS supplier for three of the five LSPs – Southern, Eastern and North East. Philips was chosen for London and Kodak and ComMedica were chosen for the North West and West Midlands region (see Table 1). For the North West and West Midland region, Kodak will provide CR systems, RIS and archiving systems where as the PACS software will be provided by ComMedica.

Table 1: Outlay of NHS PACS Contracts

| Region | LSPs | Main Application Provider | PACS Provider |
|---|-----------|---------------------------|-------------------|
| North East, Yorkshire and Humber region | Accenture | iSoft | GE |
| North West/West Midlands | CSC | iSoft | Kodak & ComMedica |
| East Midlands/East of England | Accenture | iSoft | GE |
| London | BT | IDX | Philips |
| South West/South East | Fujitsu | IDX | GE |

Source: TekPlus

Although the information about the discounts negotiated, the value of contracts and how much the trusts will have to pay locally to implement the PACS remains undisclosed, TekPlus believes the NHS must have secured heavy price reductions from the PACS vendors. However according to CSC, the North West and West Midlands Cluster contract is a 10-year, \$347.5 million deal and it estimates the value of its share of the award to be approximately \$191.5 million.

PACS installations to date in the U.K. have mostly supported radiological services within large acute trusts and specialist diagnostic areas, but PACS under the NPfIT programme will have a much broader scope. One other point is worth noting here and that is that if everything goes according to plan, there will not be much scope left and any initiative for other PACS providers in England!

Increasing importance of IT in Primary care sector

In the UK, a new GMS (General Medical Services) contract came into force on 1 April 2004. It emphasise on relating practice income directly to the quality of patient care. According to the contract, all the GP practices will be significantly rewarded for the quality of care they give and not just the numbers of patients they treat. There will also be a need to provide new data extraction and analysis tools to support the audit of clinical information for Quality and Outcomes Framework, develop new practice-based payments systems and support general practice IT. The new GMS Quality Indicator rules are complex and pose a challenge for practices wishing to optimise both patient care and quality.

The clinical information systems of GP practices play a key part in ensuring that the GPs meet all of their required targets. With the new GMS contract we expect to see lot more activities in the primary care IT market. One of the primary care-IT player, EMIS has already announced the launch of a new alerts management system – ‘EMIS Alerts Manager’ – that notifies GPs of actions needed for individual patients. The solution helps GPs to meet the requirements of the new GMS contract -relating practice income directly to the quality of patient care.

HIS related news

In April 2004, iSoft and Microsoft announced a global strategic alliance. According to the agreement, the two firms will work jointly to enhance iSoft's healthcare application – 'Lorenzo' and will jointly develop new products. Microsoft will also support iSoft solutions for delivery by third-party service organisations on a national scale. Lorenzo is built on iSoft's service oriented architecture using Microsoft's .Net technologies.

In April 2004, the UK Competition Appeal Tribunal decided to award full costs to IBA Health (in relation to iSoft-Torex merger). In particular the UK Office of Fair Trading was required to pay 82.5% of the costs. The remaining balance of costs was awarded against iSoft plc and Torex, which have already been provided for in the Settlement Agreement previously announced to the market. The amount of costs to be recovered from the OFT (including the costs from the Court of Appeal) is estimated at \$550K and is additional to the amount expected to be received under the Settlement Agreement. The Settlement Agreement was expected to become unconditional within 4 weeks. In a separate decision the OFT accepted the undertakings given by iSoft to dispose off the Torex Laboratory Systems business thereby removing any objections it had on the merger of iSoft with Torex. In June 2004, IBA announced that the Settlement Agreement with iSoft has become unconditional and all payments have been received. Furthermore the agreement by Macquarie Bank with Torex to acquire 12,368,478 shares in IBA has also been settled.

In April 2004, OFT (Office of Fair Trading) in the UK lifted its restrictions in relation to all parts of the Torex UK healthcare business. iSoft will now be able to complete the integration of the ongoing Torex business with its own UK business.

In May 2004, the UK MoD announced plans to create EHR for the armed forces. The Digital Medical Information Capability Programme (DCIMP) will centralise the health records of all 200,000 UK military personnel on a database, allowing access from anywhere in the world using a patient ID code. The information will be integrated into the evolving NHS systems. The initial contract is worth £1m, which will be for one year and will be awarded at the beginning of 2005 after an extensive assessment. Two suppliers, LogicaCMG and IBM have been short-listed for the contract. If the trial proves successful, a main 10-year contract worth up to £80m will then be awarded. Part of the condition of this contract is the introduction of an additional system promising full interoperability with the NHS by 2010. The project still requires ministerial approval and the authorization of the Treasury.

In May 2004, Cerner announced an agreement with NSW state government, Australia to provide a point-of-care clinical information system to the South Western Sydney Area Health

Service (SWSAHS). This technology will connect doctors and nurses to current medical data at the bedside for the more than 150,000 people that the state's healthcare provider sees each year. Built on the unified Cerner Millennium architecture, the solution will enable SWSAHS doctors and nurses to track care and receive test results and warnings about drug interactions on computers at the bedside.

In June 2004, Accenture finalised an agreement with iSoft - for the provision of core clinical and administration applications to the northeast and eastern region for the England NHS LSP contract. Accenture will use iSOFT's Lorenzo enterprise-wide clinical and administrative applications, currently under development. Lorenzo is expected to facilitate the flow of information across the entire healthcare community including GPs, hospitals and patients. The software has been tested for full compliance with NPfIT requirements.

In June 2004, BT has been asked by the NHS, UK to compensate for missing two targets in its delivery of the N3 broadband service. BT has met all of its 56 (except 2) milestone deliverables in the first phase of its work; the missed targets relate to delivering and testing parts of the broadband system. The sum of compensation is still under discussion.

In June 2004, IBA Health signed a \$1 million exclusive channel agreement with PrimeLink in Thailand. PrimeLink is one of the major system integrator that is active in many business segments and is well positioned in Thailand to win and implement health informatics projects. This channel agreement is in line with IBA's strategy to expand into the international markets.

A Canadian healthcare-IT player MediSolution has completed the acquisition of Conseillers Info -Orientes Inc. (CIO). CIO provides integrated financial applications for service industries and has a strong market position in healthcare and public sector organizations (more than 175 customers generating approximately \$4 million of revenue over the last year). The transaction is valued at \$5 million, comprising \$2 million in cash, \$2 million in MediSolution shares, and up to \$1 million in additional share consideration subject to achieving sales and performance targets.

PACS related news

In April 2004, display manufacturer Totoku Electric received FDA clearance for the use of the display to read mammography images as part of a PACS network.

In April 2004, ComMedica and Capula announced a formal alliance to deliver a joint, web based PACS offerings to the NHS, UK. Later on Commedica was awarded the contract along with Kodak Health Imaging and CSC for the North West and West Midlands Cluster.

In April 2004, Cedara Software signed a major agreement worth 6.1 million Canadian dollars with Hitachi Medical Corporation to supply some of its medical imaging technologies and services to Hitachi.

In April 2004, Petromed, an exclusive distributor for StorCOMM's clinical image management systems in Russia expanded the company's presence with the addition of three new installations.

In May 2004, Cedara announced a partnership with Science North in order to create a new medical diagnostic imaging exhibit. Science North is a government of Ontario Ministry of Culture agency that is internationally recognized as one of Canada's leading science centres.

In May 2004, ScImage announced the addition of Evolved Digital to its list of strategic OEM partners. Evolved Digital Systems will market ScImage's PICOMEnterprise PACS solution under the View2 brand through an OEM agreement.

Cedara continues to expand its vision in the Chinese Healthcare-IT market. In May 2004, Cedara opened a new office in Shanghai to better serve its existing customers and to successfully push new business opportunities in China. Cedara's PACS products are already sold by some of the country's leading medical equipment manufacturers. A local office in China would help Cedara establish a larger presence in the region.

In May 2004, Emageon announced financial agreement with IBM Global Financing. It will allow Emageon's customers to take advantage of IBM Global Financing (IGF) offerings. Customers will now be able to finance all Emageon products and services using a single source agreement with favourable financing terms.

In May 2004, Fischer Imaging and Cedara software entered into a co-operative sales, marketing and support agreement. Under the agreement customised version of Cedara I-ReadMammo(mammography workstation) workstation software will be integrated with Fischer's SenoScan digital mammography scanning system. In addition to its current workstation, Fischer will also offer I-ReadMammo-based SenoView dedicated mammography softcopy workstation. For more advanced applications, where multi-modality image display and review are required, Fischer will offer the SenoView Plus - combining both the I-ReadMammo and I-SoftView Cedara software.

In May 2004, Fischer Imaging and Kodak announced a worldwide agreement whereby Fischer will offer KODAK DIRECTVIEW PACS System 5 (includes Kodak's DIRECTVIEW Versatile Intelligent Patient Archive (VIParchive) management software) with Fischer's SENOSCAN® systems for digital mammography.

In June 2004, Vepro (PACS provider) and minimally invasive surgery vendor Richard Wolf announced plans to team up to create a complete operating room endoscopy (CORE). It combines endoscopy equipment with Vepro's MedImage PACS technology, directed by a central system control.

In June 2004, Sectra acquired the remaining shares of its digital mammography unit Mamea Imaging. After the acquisition, Sectra's ownership position increases from 95% to 100%.

In June 2004, Tokyo based Fuji Film Co. (parent company of Fujifilm Medical Systems) invested \$4.95 million in 3D software developer TeraRecon. Under the terms of the deal, TeraRecon will apply its technology in image and signal-processing processors and software to Fuji's new product development efforts.

In June 2004, computed radiography and digitiser provider iCRco signed an agreement with AMD Telemedicine. According to the terms of agreement AMD will market and sell the iCRco CR and film scanner systems under the AMD Telemedicine brand through out the world.

In June 2004, Cedara software announced partnership with Medipattern Corporation – developer of CAD software applications for medical imaging. Under the terms of the partnership agreement Cedara will be the exclusive global channel for Medipattern's breast ultrasound computer aided diagnosis (CAD) and detection technology.

Other significant HIT related news

In April 2004, GE completed \$10 billion acquisition of Amersham, with it GE has expanded its reach in scientific research systems. Amersham has two businesses – Medical Diagnostic business that provides diagnostic and predictive imaging products and services and Life Sciences business that provides integrated systems and solutions for disease research and drug discovery and development. The addition of Amersham is expected to generate \$15 billion healthcare business in 2005. The acquisition will enable GE to target emerging areas of biotechnology, advanced diagnostics and targeted therapies by combining GE Healthcare's imaging technology and Amersham's pharmaceutical biomarkers. It will also open up new routes for GE Healthcare to the pharmaceutical industry.

In April 2004, McKesson announced its plans for making organisational changes in each of its three business segments (Pharmaceutical Solutions, Medical-Surgical solutions and Provider Technologies). The strategy is to sharpen focus on customer needs and there by accelerate business growth. McKesson Provider Technologies combines the operations of McKesson Information Solutions, McKesson Inpatient Automation and the company's Corporate Solutions Group with stronger focus on the needs of the provider marketplace for integrated technology solutions.

In April 2004, McKesson completed the acquisition of Moore Medical – an Internet-enabled, multi-channel distributor of medical, surgical and pharmaceutical products. Now Moore medical will become part of the Medical-Surgical business of McKesson.

In May 2004, the German National Association of Statutory Health Insurance Physicians (Kassenärztliche Bundesvereinigung KBV) has certified Agfa's Radiology Information System (RIS) solution. KBV certification is a key condition for any RIS solution to be acceptable in the German healthcare market as this confirms compliance with the German health insurance regulations. Agfa had introduced its RIS solution in Germany at the end of 2003.

In June 2004, Merge eFilm received ISO certification for its two quality systems. It has received ISO 13485 for the design, development and servicing of medical imaging and information interfacing, storage and distribution devices and software and ISO 13488 for the development and sale of imaging diagnostic software.

In June 2004, TietoEntor acquired Respons AS for €4.2 million. Respons AS is a Norwegian company that specialises in software solutions for municipalities in Norway and Denmark. The acquisition is aligned with TietoEntor's strategy to obtain a leading position in the Nordic healthcare and welfare IT market.

Siemens Medical systems and Gamma Medica have expanded their marketing relationship for Gamma Medica's X-SPECT preclinical molecular imaging system. Siemens had US right for X-SPECT since July 2003; now under the terms of this deal, Siemens will gain exclusive worldwide marketing rights for X-SPECT, an integrated SPECT/CT system.

In June 2004, Eclipsys formed a strategic partnership with Van Slyck & Associates. The alliance enables Eclipsys to combine its clinical documentation capabilities of its advanced clinical software solution with Van Slyck's patient classification/acuity methodology. This will enhance patient safety and nursing satisfaction.

Significant solution news

In April 2004, MediSolution announced a new business intelligence solution that meets the unique needs of the healthcare market. It is based on Microsoft SQL Server 2000 and enables providers of healthcare services to improve patient care, increase operational efficiencies and reduce costs.

In April 2004, Evolved Digital Systems announced the release of a new View2 Imaging product line that includes web based, fully featured combined radiology and cardiology PACS solution.

In May 2004, Kodak announced availability of its KODAK DIRECTVIEW Versatile Intelligent Patient Archive (VIParchive) management software in the United States, Canada and Europe. The VIParchive software platform provides centralized, enterprise-wide management of images and information associated in clinical systems such as RIS and CIS (cardiologyIS). It also manages back office systems including purchasing, inventory and other records systems. Kodak has incorporated its VIParchive platform within its DIRECTVIEW PACS System 5, and also offers the full enterprise-wide management capabilities of the software platform as part of KODAK Enterprise Information Management Services.

Kodak has also introduced a web-based service that remotely monitors its digital medical imaging equipment at customer installation sites. This will help customers, as it will maximize uptime by diagnosing potential malfunctions before they occur. The services includes proactive system monitoring, remote diagnosis and software distribution using secure, encrypted communications.

Kodak has also launched a worldwide secure email service that enables patient medical information to be shared in accordance with each country's privacy and security standards. This service allows any type of electronic document, including laboratory and radiology reports, electronic patient records, billing statements and imaging studies, to be delivered securely to any recipient worldwide—without the need for additional software at the recipient's site. It enables medical providers' and payers' compliance with applicable portions of the United States' HIPAA (Health Insurance Portability and Accountability Act) privacy and security regulations, the European Community's EC 95/46 Personal Data Privacy Directive, as well as many additional regional regulations.

In May 2004, Fujifilm Medical systems announced the availability of new pricing models for Synapse in the US market. Fuji had software usage-based licensing model that enabled the users to pay licensing fee based on the number of active connections. Now Fuji has

introduced a volume-based license model that provides unlimited use of the Synapse application regardless of the number of servers, workstations and modalities they may use. Another new program Fuji has designed is Single Step to Digital (SSD) – it is targeted at smaller facilities conducting fewer than 45,000 radiological studies a year. The program enables them to transform into a completely digital environment at an affordable price. It offers three individual purchase packages combining Synapse, Fuji Computed Radiography (FCR®), and Fuji DryPix™ imagers. Options include the purchase of just Synapse; Synapse with Fuji's XG5000 and DryPix™ 5000; or Synapse with the SmartCR® and DryPix 3000. For healthcare facilities requiring the greatest level of forward-looking cost assurance, Fuji has recently launched IT CAP - Information Technology Control and Predictability. This shared-risk financial solution requires no initial capital outlay as well as offers the lowest financing rates in the industry. With IT CAP, facilities can obtain a full Synapse system up front - versus having to "piecemeal" incrementally a system based on unpredictable budgets - and can use a fixed cost-per-study, which is determined by the exam volume, study size and projected five-year growth. These strategies are expected to broaden Fuji's reach from IDNs and large healthcare facilities to smaller, stand-alone and rural hospitals.

In May 2004, Fujifilm announced the commercial availability of Synapse Version 3.0 mr1 having enhanced Reading Protocols. The Reading Protocols automate the presentation of all information contained within Synapse including documents, image processing parameters and results. Fuji also announced the availability of a multi-site foundation technology called CommonView. It automatically brings patient results from multiple sites together into a single patient-focused work list. CommonView ensures accuracy and complete access to the entire patient imaging record regardless of where previous imaging exams were performed and eliminates the need for an expensive Master Patient Record system.

In May 2004, Cedara Software received FDA clearance for Cedara I-ReadMammo(TM), its new mammography reading workstation. The FDA clearance enables Cedara to offer I-ReadMammo into the US – the largest and fastest growing digital mammography market in the world.

In May 2004, Intelrad introduced a range of premium features into its IntelePACS InteleViewer. These features are designed to enhance image manipulation, workflow and communication. They are – image selection and annotation tools, intelligent auto-window-levelling algorithms, enhancements to its advanced Layout Manager and the ability to create 'virtual series', WYSIWYG postscript printing and JPEG exporting, the ability to drag-and-drop and select thumbnail image series and finally a broad range of new user-specific preferences.

In June 2004, RealTimeImagre received FDA clearance for its iPACS OrthoPlanner package. It is a Web-based digital workflow product that can convert a standard network-connected PC into a full-featured, specialized orthopaedic workstation with optional archiving capability.

In June 2004, Toshiba America Medical Systems introduced new version of its e.soft nuclear medicine software platform; it includes e.soft version 3.5 and e.soft express version 2.0. The new release goes in line with Toshiba's Broker Activity that is designed to ease the integration of third-party applications into the e.soft workflow environment.

Philips Medical has introduced a number of product offerings in nuclear medicine arena such as Precedence and JETStream Workspace. Precedence will be available in two kinds – a 16-slice system worth approximately \$1.4 million and a 6-slice scanner priced at approximately \$1.1 million. JETStream Workspace is a work-in-progress nuclear medicine workstation software package that enables users to perform image display, processing, review, reporting and image archiving on one environment.

In June 2004, MedPACS released free updates to its Vista PACS offerings users – it enables automatic routing of any images to their location once the user logs in. The latest version also lists the studies in the archive associated with the patient.

In June 2004, Merge eFilm released the latest version of its PACS offerings – Fusion PACS 1.2.7. The Fusion PACS 1.2.7 enables web-based delivery of images and reports to referring physicians. It also enables automated access to third-party legacy DICOM archives and expanded image manipulation tools via an image viewer plug-in.

In June 2004, India based medical informatics player, Ashva Technologies released a Microsoft Windows PC-based DICOM converter, DICON-iT. It runs on any PC connected to a RIS/PACS, allowing users to import image files or access standard scanning devices.