HealthManagement
Promoting Management and Leadership

Volume 9, Issue 4 /2007 - Medical Technology

IT and Medical Technology Pulling Together

Authors:

Timo Baumann,

Head of Department Service Centre IT and Organisation,

Klinik am Eichert, Göppingen,

Germany

Email: timo.baumann@kae.de

Joachim Hiller

Head of Biomedical Department,Klinik am Eichert,

Göppingen,

Germany

Email: joachim.hiller@kae.de

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

Information technology and biomedical technology are subject to constant adaptation. This is particularly clear in the field of biomedical technology with its orientation on the narrow level between natural sciences and medicine. Reduced to a common denominator: “The patient should benefit as soon as possible from a technological advance.”

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

Biomedical Technology in Changing Times

From classic precision engineering, the orientation of this specialist discipline has changed totally and is today found more in mechatronics. The absolute necessity to open up to IT came about concurrently with the use of standard IT components such as PCs, network technology and database applications, etc., in nearly all areas of medical technology.

IT in the Patient Environment

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

Marketing, operating and using these IT components suddenly came under the rules of EN 93/42, in Germany, the MPG (the Medical Products

Act) and the MPBetreibV (the Medical Products Operators' Ordinance) as the legal basis and IEC 60601-1-1 with regard to electrical safety.

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

Medical Technology Specialist Departments Link up

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

A few figures

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

• approx. 4,700 active medical products from approx. 250 different producers are supplied mainly by the medical technical service centre.

• approx. 40 software applications with 1,500 IT appliances and their 2,100 users and 42 current IT projects represent the remit of the SCIO (Service-Center Informationstechnologie und Organisation -

Service Centre for Information Technology and Organisation).

Organisational Measures

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

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

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

The Teams Grow Together

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

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

A bi-monthly regular meeting on performance level has been implemented. Here, subjects that need to be dealt with top-down are on the agenda, e.g., the collection of current themes and their prioritisation, or the distribution of employee resources among the actual projects. Staff from both departments rotate for the daily briefings, twice a week. This already makes for an enormous exchange of experience!

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

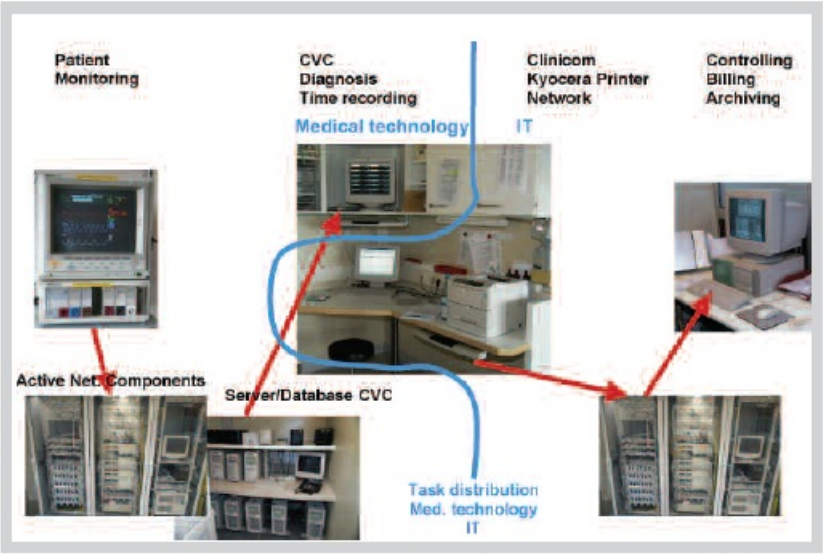

Figure 2 shows an insensive support point with all subcomponents The tasks of biomedicine interact with those of IT like a jigsaw!

Summary

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

Published on : Fri, 26 Oct 2007