



Overview

Country or Region: Russia

Industry: Healthcare

Customer Profile

The Haematology Centre of the Russian Academy of Medicine Science is a leading medical institution with 1,500 employees. It specialises in researching and treating of blood-related illnesses.

Business Situation

The organisation needed a robust and flexible IT system to support the pioneering work of its doctors and improve collaboration across the organisation and with external partners.

Solution

The centre expanded on its existing Microsoft® Office suite by embedding Open XML Formats, creating standardised templates and records that could be accessed by other institutions.

Benefits

- Open standards support collaboration
- Doctors spend more time with patients
- Clinicians access centrally stored data
- Employees create sophisticated records
- Patients receive better care

Leading Russian Medical Institute Improves Employee Efficiency and Collaboration

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The Haematology Centre of the Russian Academy of Medicine Science is the leading institute for the training of haematologists, blood research, and treatment of blood-related diseases in Russia. To support the work of its doctors and administration staff, the centre needs a robust and flexible IT system. But, until recently, it was struggling with a range of IT products, which prevented efficient collaboration—both internally and externally. To resolve these issues, the centre deployed Microsoft® SQL Server® 2008 data management software and Microsoft Office Professional 2007, with custom XML embedded into its Open XML Formats, a recognised international standard, for representing spreadsheets, charts, and presentations. Now, employees use a standardised, automated environment that dramatically improves treatment and research efficiency, and supports better communication with other research organisations.



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Situation

The Haematology Centre of the Russian Academy of Medicine Science was founded in 1926 in the early years of the former Union of Soviet Socialist Republics (USSR). Originally intended as a blood transfusion centre, it quickly grew to prominence, becoming the foremost facility of haematology in the USSR due to the outstanding quality of its doctors and research. Today, the centre is independent from municipal medicine, but it remains a leading institute of blood research, treatment, and surgery, and has trained more than 2,000 haematologists who work across Russia. It also stores a wealth of haematology data and created the first national standard of medical records for the whole of Russia, which is regularly referred to by hundreds of regional medical and educational institutions.

The centre’s 1,500 employees are under constant pressure to deliver top-class health services to tight budgets and strict timelines. And, like many employees in this field, they depend on technology to automate and simplify as many operational processes as possible.

One of the main challenges facing the Haematology Centre is the management and exchange of vast numbers of documents, data, and images stored as both paper and electronic copies. Unfortunately, the previous document and data management system, developed using Microsoft® Visual FoxPro® programming language wasn’t universally popular with users.

Boris Zingerman, Head of IT, Haematology Centre of the Russian Academy of Medicine Science, explains one of the key challenges: “When doctors or other staff fill out standard forms, they want to enter information in a standard, user-friendly template. But the previous system lacked the familiarity and ease of use that we needed.”

As a result, not all documents and data were saved and captured consistently, and there was an overreliance on paper copies that inevitably compromised patient service and overall efficiency. Zingerman says: “Reducing the amount of time doctors spent on administrative tasks was high on the agenda.”

He also wanted to standardise the process so that documents and data can be saved and consolidated to a single database, and shared with authorised users and organisations. “But this was a challenge because we produce different data types including text, ultrasound pictures, morphology, computed tomography, and diagrams, which all need to be transferable to other medical and educational centres,” says Zingerman.

Solution

Zingerman and his team reviewed the market, holding several meetings with Microsoft to discuss the deployment of a new suite of productivity applications. It soon became clear that Microsoft Office Professional 2007 addressed the technical requirements of the centre, especially the fact that documents can be created and saved using Open XML Formats for representing spreadsheets, charts and presentations, a recognised international standard.

Doctors at the centre were already familiar with the interface, having used previous editions of Microsoft Office. The conclusion was that upgrading the existing IT environment was the best plan. Zingerman says: “We didn’t even seriously contemplate another solution. The Microsoft environment is familiar, simple, and intuitive—we could set it up with few complications and get support when we needed it.”

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In November 2007, the group started the development of the software, taking advantage of the expertise of the in-house IT department. This work was completed in March 2008, and deployment took place one month later.

Now, doctors can quickly open standardised templates and complete them with automated signatures, which can be adapted easily if required. These documents, along with the data that they hold are saved in Open XML and automatically integrated into Microsoft SQL Server® 2008 data management software, which holds data for 40,500 patients, 589,000 records, and more than 2 million clinical tests.

All forms of media, including text and machine readable data, can be shared among organisations, even if heavily customised. Zingerman adds: “Doctors select the patients they are working with, then the document they want to produce. The system immediately calls up the template, which the doctor completes. The document can then be easily shared with other institutions.”

Benefits

Today, the centre is one of the most important institutions for the treatment of all blood-related diseases in Russia. With Office Professional 2007, doctors can now produce work that tightly integrates with the clinic’s information system as well as external organisations. Zingerman says: “Office Professional 2007 really helps our staff with daily tasks by simplifying the creation of documents. And, due to Open XML Formats, we can send and receive information from institutions around the country.”

Open Standards Support Better Internal and External Collaboration

All documents and data are based on Open XML. Through this standardisation, information can be exchanged easily between

authorised individuals within the organisation. Zingerman says: “All outputted data can be read, edited, and saved from anywhere in the hospital.”

Also, Open XML is an international standard that can be read by other organisations, so they can benefit from the research conducted by the centre as well. This has enormous implications for the quality and consistency of patient care from one medical practice to another. It also ensures that information is far less likely to become corrupted or confused as it moves from location to location.

Doctors Spend More Time Face to Face with Patients

For many processes, doctors can now open customisable templates that have been specifically designed to reduce laborious manual tasks. These templates are modular, drawing on 279 different parts. If a new project is created, the IT team can create a template or modify an existing one accordingly.

This also makes it easier to create standardised patient records that can be exchanged between different care practices and also given to patients creating a more personalised service and a better overall patient experience.

Critically, the new system reduces the time spent printing, completing, and collating paper documents. It means that doctors spend more time with patients and less time on administration.

Clinicians Gain Easy Access to Centrally Stored Records

The quality of patient care depends fundamentally on the quality, security, and depth of the information held about them and their conditions. This is where the centre’s employees have seen a huge improvement.

For More Information

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For more information about Haematology Centre of the Russian Academy of Medicine Science products and services, call (7) 495 612 2123 or visit the Web site at: www.blood.ru

One of the greatest achievements is the consistency of the data now captured by clinicians either when dealing with patients or with information imported from test databases. Now that they only have to deal with one centralised Microsoft database, their work is made a lot easier. "Doctors can populate records with data, which is imported from test databases," says Zingerman.

With Open XML one document can be linked to several databases. This means that a single file can draw on the information from multiple sources and employees no longer need to keep separate documents with fragmented information that correspond to each database.

Employees Create Richer and More Sophisticated Records

The move to Microsoft Office Professional 2007 has been delivering results since day one of the deployment. Most users are familiar with the interface and are taking full advantage of the Microsoft Office Fluent™ interface and the Office Fluent Ribbon—finding the functionality that they need more quickly and creating richer, more sophisticated records.

As well as reducing the cost of deployment, the centre has migrated to probably the most advanced and most popular desktop productivity suite available. To achieve this goal with minimum disruption is a huge advantage for an organisation that cannot afford delays or hold-ups associated with training—not least because otherwise it would

have compromised the quality of patient care.

Microsoft Office System

The Microsoft Office system is the business world's chosen environment for information work, providing the programs, servers, and services that help you succeed by transforming information into impact.

For more information about the Microsoft Office system, go to: www.microsoft.com/office

Software and Services

- Microsoft Office
 - Microsoft Office Professional 2007
 - Open XML

- Microsoft Server Product Portfolio
 - Microsoft SQL Server 2008