Centre Hospitalier Affilié Universitaire Hôtel-Dieu Lévis (CHAUHDL) seeks more space, gains instant access to patient files

SITUATION

Centre Hospitalier Affilié Universitaire Hôtel-Dieu Lévis (CHAUHDL) ran out of space for patient charts in the Medical Records area. The Hospital decided to transfer from a paper-based to an electronic storage system to make room for additional medical charts.

OBJECTIVE

Implement a long-term solution that goes beyond merely solving the space problem to enhancing access to patient files for all users all at the same time. Create an electronic storage system that is reliable and 100% accurate so paper documents may be destroyed after they are scanned.

SOLUTION

Two **Kodak** i660 Scanners, one **Kodak** i620 Scanner, **Kodak** Capture Software, **Trigonix** document scanning services, and the **Purkinje|Dossier** Electronic Health Record (EHR) solution software.

COMMENT

"With the **Kodak** Scanners as part of its solution, CHAUHDL's physicians get better information, faster, and that allows them to make better decisions, faster."

~ Denis Asselin,
Trigonix, an authorized reseller
of **Kodak** Products in Montreal

What started as a mission to make room in its archives department became an enterprise-wide solution that gives CHAUHDL's 2,043 employees instant access to patient files.

"It began when we ran out of room in our Medical Records department," said André Lavoie, Director of Hospital Services. "We needed to add patient charts without building additional square footage. As we evaluated electronic storage systems, we realized we'd gain a bigger return on our investment by purchasing a long-term solution to evolve with our growing demands for accessing patient charts anytime and anywhere."

Retention of files restricted access to information

Centre Hospitalier Affilié Universitaire Hôtel-Dieu Lévis (CHAUHDL) is a 343-bed teaching hospital in Lévis near Quebec City, Quebec, Canada. The hospital employs 2,043 professionals including 200 physicians.

After CHAUHDL decided to transition to an electronic chart storage system, the failures of its paper-based system became ever-more obvious. One big problem: when a physician obtained a patient file, they kept it — which meant no one else could access the chart while it was in the doctor's possession. Often, another specialist might be treating the same patient at the same time and would therefore not have access to the chart. This delayed treatment and hampered optimized medical care.

Another problem with storing information on paper was the amount of labor, time, and space required to retrieve information and put it back in its proper place.

"We retrieve 1,000 patient charts a day. Our archivists had to find the files, process them, and return the folders to their proper places. When

you receive 1,000 requests a day, that adds up to a lot of time and labor," said Chantal Lafrenière, head of the Medical Records department, CHAUHDL.

Efficient evolution from paper to electronic storage to the Electronic Health Record (EHR)

CHAUHDL worked with Purkinje and Trigonix to purchase its electronic storage solution. The companies had the proven experience and equipment to achieve their vision of sharing patient files with the click of a button. Trigonix's first-rate professional scanning services include rigorous quality-assurance controls that are reflected in their ISO 9001:2000 accreditation. Purkinje provided the e-Documents (scan + view) as well as the Lab and Imaging Results software that allows healthcare professionals to view the patient files and results from anywhere in the hospital.

CHAUHDL selected two **Kodak** i660 Scanners, one **Kodak** i620 Scanner, **Kodak** Capture Software, and the **Purkinje|Dossier** Electronic Health Record solution software.

"With the backlog of files they had to scan, we felt it would be most efficient to scan the files based on request. They scan the charts for those patients who have appointments in the next two days. The system has to be reliable and efficient. There can't be mistakes or poor quality because the records have to be in the system — accurately — by the afternoon," said Asselin.

CHAUHDL uses the **Kodak** i660 Scanners to scan large batches of patient files each morning. They use the **Kodak** i620 Scanner to update and add information — results, notes, reports, forms — to already scanned patient records on a day-to-day basis.

Accuracy and quality, STAT

CHAUHDL relies on the multi-feed detection feature of their **Kodak** Scanners to ensure physicians see every single page in a patient file when they look at records on screen.

"Nothing can be missing," says Asselin of his customer's application. "When the records are scanned, they need to scan 100% of the pages. For the multi-feed detection features, **Kodak** Scanners have three sensors that alert the scanning operator when pages are stuck together, a corner is folded, or any other situation that might cause information to be missed. The scanning operator receives the alert, fixes the problem, and continues scanning the patient chart."

"CHAUHDL relies on its scanners to scan documents completely, without fail. There is no other option: they destroy the paper documents after they are scanned. So they must be certain they've scanned all the information," notes Asselin.

How can CHAUHDL get away with destroying original health records? The answer: Kodak's quality and color. Color scans from the **Kodak** Scanners are considered exact replicas of the original documents and meet all requirements from a legal perspective. Furthermore, the scanning process within the hospital is certified by Quebec's National Archives before the records can be destroyed.

Easy for the end user: patient records at the click of a button

The true value of the solution using **Kodak** Scanners is apparent when one sees physicians use the **Purkinje|Dossier** Electronic Health Record solution software to get instant access to critical medical information. Everything about each patient's health record is stored together in one place in the database. Results can be viewed on screen immediately.

"We've had training sessions as quick as 10 minutes and as long as an hour," says Sonia Mokbel, Director of Marketing for Purkinje. "In every case, the doctors have been up-and-running within 60 minutes."

Each authorized hospital employee uses a personal setting to find files from any

computer within the network. The problem of file retention has been eliminated. Numerous medical professionals can access the same patient file from an unlimited number of locations all at the same time.

"**Purkinje|Dossier** software is unique in that it allows physicians to view electronic health records and also incorporate PDF files that can be annotated and indexed," explains Lucian Jeglinschi, Vice President of Project Management. "Lab and imaging results as well as transcription reports are received directly into the software via HL7 messages. They are automatically delivered to both the patient file and also each treating physician's Inbox, instantly. No more lost files. No more waiting for critical information." Healthcare professionals can view the results in three different ways, depending on their preferences and needs: reports, tables, graphs. The electronic prescriptions provide evidenced-based decision support with its drug and allergy interactions. The EHR also enables care providers to quickly document the encounter so all the patient information is easily accessible in one place.

"This is **Purkinje|Dossier** software's added value," notes Mokbel. "The software is completely scalable to the hospital. Especially when it comes to indexing information and files, which makes it easy for doctors to find results and follow the episode of care."

Lightening the load: full patient records at your fingertips

Previously, physicians kept medical records in their possession and carried the charts with them to various offices and treatment facilities. One patient's file was so large it included more than 8,000 pages and occupied one-and-one-half archive boxes. And the treating physician had to carry this tome with him to different treatment and surgical facilities. Now, the doctor can simply and quickly refer to the entire 8,000-page patient record on screen from any office within the hospital system.

The new system also makes life easier for CHAUHDL's archivists too. In the past, when the files were returned, the archivist had to get the doctor

to sign off in person, certain documents before putting the medical chart back in its proper place. That's a lot of steps … and all those steps have been completely eliminated with the solution featuring scanners from Kodak. Now the doctors review and sign off on files on screen at their convenience without making a trip to the Medical Records department.

Instant access makes a difference in emergencies

Prior to implementing their new system, it took an average of 15 minutes to find and pull critical files for CHAUHDL's Emergency Room patients. In many emergency situations, doctors can't wait that long to administer treatment. So the Emergency Room doctors treated patients before they even received the patient's medical records.

Now, the Emergency Room doctors see patient files on screen within seconds of when a patient is admitted to the Emergency Room. This instant information can save lives by alerting doctors to lethal drug interactions and allergies.

It's impressive to realize that, thanks to a new way of working and the advantages it offers, **Kodak** Scanners can truly make a positive difference when it comes to treating patients at Centre Hospitalier Affilié Universitaire Hôtel-Dieu Lévis.

To learn more about **Kodak** Document Imaging Products and Services, contact your Authorized Reseller of **Kodak** Products, call 1-800-944-6171, or log on to **www.kodak.com/go/docimaging**.

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