

Into the New Age: QEII Health Sciences Centre's Communications System

Exploiting sophisticated call-centre technology

By Jane Doucet

In 1996 six hospitals in Halifax, Nova Scotia, merged to become the Queen Elizabeth II Health Sciences Centre. The largest adult academic health sciences centre in Atlantic Canada, the QEII Health Sciences Centre occupies 10 buildings on two sites and provides tertiary- and quaternary-care services for patients across Nova Scotia. In 2000 it became part of the province's Capital District Health Authority (CDHA), an integrated health authority that covers a territory that stretches from Windsor to Sheet Harbour.



QEII Health Sciences Centre

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Before the merger each hospital was site-specific. After the merger the QEII's staff expanded to 6,500, and administration of the formerly individual hospitals became centralized. As a result, some logistical problems occurred; the amount of information flowing through the system doubled and systems that were operated

manually in the past were now "impossible" to handle.

For example, Greg Jeans, the manager of Voice Services at CDHA, his colleague, Betty Bouchie, CDHA's voice administrator, and call centre staff had to manually coordinate 200 different on-call schedules for 2,000 medical-staff members. It was a nightmare. According to Jeans, any print information became out of date as soon as a duty roster was posted and staff members inevitably would call in with schedule changes. At one point it took three full-time employees to handle scheduling. Keeping the rosters up to date was a time-consuming task, and inaccurate information was often posted to some schedules.

In 1999 Jeans and Bouchie tried to create an internal system and database to address the problems, but soon realized the complexities to create this

type of system were well beyond their capabilities. They decided to take serious action researching communication strategies at other Canadian hospitals and supplier options in the marketplace.

Bouchie contacted the communications department of every major Canadian hospital and discovered that all of them were experiencing similar, if not worse, problems, as the QEII's. She made a list of what she wanted a new system to do and began searching for the answer on the Web. That's when she found an interesting



Amtelco 1Call Infinity System

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system from a U.S. based manufacturer. After a Web/teleconference presentation, she was very interested. In the spring of 2000, she found a hospital in New Hampshire that was using this Wisconsin-based Amtelco 1Call Infinity System, and paid them a visit. After that, she knew it was exactly what she wanted.

The QEII's communications system links doctors, nurses, staff and customers by providing a single source for information and communications from one location. When connected as a call centre or switchboard, information is presented to the operator on a PC screen in a consistent and logical manner, allowing operators to handle more calls in less time. The system handles such things as patient and staff directories, on-call scheduling, call priority, distribution, statistical information, appointment scheduling and paging or locating services.

In October of 2002, 1Call went live at the QEII. Prior to that date Bouchie, with a team of five, spent five months organizing and programming the relevant data into the system. Initially, the transition was tough. One of the biggest challenges was the resistance of the switchboard operators to embrace the new system, but 98% of the staff successfully made the transition to 1Call.

The system has improved efficiency notably. With the old paper-driven system, only one operator could be trained at a time in a process that took four months; now two call centre attendants—or locators, as they are also called—can be instructed simultaneously in just five weeks. Each of the 12 call centre locator positions conducts all functions through the PC; answering, dialing, paging, messaging and call recording.

Although the QEII has been using 1Call for eleven months, they are not yet using it to its fullest capability; however, its accuracy rate is significantly higher than the old paper system's rate of 95 percent. Jeans hopes to reach maximum effectiveness in 2004. A year after that, he expects to have received a full payback in operating-cost expenses followed by long-term savings while offering several new or improved messaging/information movement services supporting the Nova Scotia medical community.

Another advantage the system offers is accountability. Since every call that comes in is recorded and monitored, when something goes wrong, it is possible to trace backward in the system to reveal the error. For instance, the QEII's communications centre acts as an internal 911 system, receiving and processing a wide variety of emergency response codes, for such things as fires, chemical spills, external disaster and patient distress. The system prioritizes all

emergency calls, overriding any less urgent calls.

Any of the average 6,000 daily incoming calls the locators can be thoroughly investigated. Administrators find out who called who answered the call and at what time, and what keystrokes were made in the process. This can identify whether a problem was a communications error or the result of something else, like a pager that wasn't working.

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While there have been some kinks in the system to iron out, the QEII's communications team hasn't been left to deal with them alone. In the beginning Amtelco's field-service technicians were called on regularly, but now only occasionally. Jeans is also impressed with the service the company provides. He cites a hardware problem that was discovered 10 months after commissioning 1Call. Amtelco sent a technician to fix the problem, armed with all new system hardware—at its own expense.

Now that the system has been operating for a year, QEII staffers wonder how they ever managed without it. The operators initially resisted implementing 1Call. Now they believe a hospital even half the size of the QEII could not work efficiently without this tool.



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