



E-Health: An Oncology Connection

by Jim Christie and Patti Jamieson-Baker, M.S.S.W., M.B.A.

E-health is on the minds of almost everyone. We read about e-health in our professional journals and hear presentations on e-health at conferences. How does a health care institution, and particularly an oncology program, develop an e-health strategy that is feasible and beneficial to its patients and physicians? At Alexian Brothers Health System in Elk Grove Village, Ill., we are searching for an answer as we embark on our own e-health journey.

With the new federal privacy regulations that go into effect in 2001 and the need to protect our patients' privacy rights, providing timely and accurate health care information to patients, their families, and physicians has become critical. At Alexian Brothers, we established a Network Mission "to enable better, faster, cheaper access to health care data at any time from any place using the Internet and standards based on emerging technology solutions." Our goal within the next two years is for patients, their families, and physicians to have secured access to health care information, 24-hours a day, seven days a week.

For health care professionals, Alexian Brothers has developed a three-phase e-health development strategy. In phase I, we plan to provide physicians and clinical staff

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with access to concurrent information regarding admissions, discharges, transfers, and reports, including lab and transcribed dictation. Customized census reports will also be available online.

Clinicians will be able to access this warehouse of information securely via a virtual private network (VPN) using standard "browser" technology. In phase II, physicians and clinical staff can access pharmacy information and clinical messaging, including medication interaction alerts, labor result alerts, and dictation and transcribing. In phase III, physicians and staff will be able to order online, provide an electronic signature, and have the potential for wireless messaging.

In addition, Alexian Brothers has developed a two-phase e-health strategy for patients and consumers who can access information via the Internet. Phase I will coordinate and integrate current web sites, develop a job site for the entire system, and provide customized consumer information portals as well as access to online gift-shop services, foundation-planned giving, chat room, and education courses. Phase II will provide eligibility verification, advanced beneficiary notices, pre-registration, patient financial accounts, patient scheduling, health bookstore, and pharmacy services online. This strategy will also have the capability of co-branding physician web sites to provide information to patients and their families and links to hospitals.

Such a sophisticated and user-friendly e-health plan comes with major security concerns. Thus, we will make sure that all of Alexian Brothers' strategies comply with

the Health Insurance Portability and Accountability Act (HIPAA) requirements. We plan to use 128-bit data encryption/decryption and will require strong authentication and authorization. Furthermore, we will customize information access privileges, and provide audit trail of all access. Our plan includes disabling browser cache/auto-time-out and integrating with biometric technologies.

Also on the planning board is for Alexian Brothers to develop a customized patient web site. Patients will be able to request and access medical information through their own web site. The oncology program is also proposing an online chat service. Patients would ask a specific question or learn about a particular disease site and treatment information.

What's more, under our e-health system, patients and their families will be able to leave messages for health care professionals and schedule an appointment. Patients will be able to refill a prescription and access patient-directed education.

Our goal at Alexian Brothers is to improve quality of care by eliminating lost results and duplicate testing, by offering faster and more accurate diagnosis information, and making available quality physician and clinical staff time for patients. Cost efficiencies will be realized by reducing the number of pulled charts, phone calls, faxes, and courier expenses. Ultimately, this technology will provide streamlined care paths, improved business processes, and reduction of paper-based and manual activities.

The challenges are significant but not insurmountable. ■