Hays Cancer Center

A Community Leader with Vision

The Hays Medical Center (HMC) in Hays, Kans., has provided cancer care to patients of northwestern Kansas and southwestern Nebraska for more than 50 years. The success of the Hays cancer program, which has received American College of Surgeons' Commission on Cancer accreditation since 1952, can be attributed, in part, to its use of a team approach to comprehensive cancer care. Physicians, nurses, therapists, medical physicists, dietitians, social workers, clergy, and other health care professionals provide a multidisciplinary and coordinated approach.

To better serve its growing community, HMC has been expanding its regional medical center and developing new services so that area residents do not have to travel to Wichita or Denver for specialized care, said HMC's president John H. Jeter, M.D.

Expansion of the Hays Cancer Center, phase I of its capital expansion program, was completed in 1997. The 7,500-square-foot facility on the north end of the St. Anthony Campus houses both medical and radiation oncology departments in a beautiful ground-floor facility. Unique chemotherapy delivery rooms allow for patient privacy, while nurses remain centrally located. Each of the eight private rooms has a TV, VCR, and recliner. In addition, conformal radiation treatments are delivered using a new Varian 21EX linear accelerator with 120 MLC and an ADAC Pinnacle 3-Dimensional treatment planning system.

The cancer program also provides prostate seed implant as well as skin, breast, cervical, and colorectal screening. Starting in 2000, the cancer program began participating in clinical trials as a new member of the Southwest Oncology Group.

TELEONCOLOGY

In addition to its many achievements, HMC is giving new meaning to the term "outreach." For the past six years, Kansas University Medical Center (KUMC) in Kansas City, Kans., has provided cancer diagnosis and treatment services via a video-audio link with Hays Medical Center—280 miles away. Patients who live as far as 130 miles away from Hays drive to the Hays clinic where they have face-to-face

The Hays Medical Center was established in spring 1991 as a result of the merger of Hadley Regional Medical Center and St. Anthony Hospital. The not-for-profit medical center's long-term goal is to be the best tertiary care center in rural America. For more information, contact Hays Medical Center at 785-623-5000, or visit the web site at: www.haysmed.com.

VITAL STATISTICS

- Total hospital bed size: 137
- Cancer unit beds: 8
- Number of analytic cancer cases seen in 2000: 425
- Managed care penetration in the state: 19 percent

SELECTED PATIENT SUPPORT SERVICES

- The Community Access Rural Express (CARE) Van, provided by the Kansas Department of Transportation in conjunction with the Developmental Services of Northwest Kansas and HMC, provides daily transportation to patients throughout northwestern Kansas for 50 cents per traversed county.
- The Kansas Breast and Cervical Cancer Initiative provides for breast and cervical cancer screening and diagnostic services to low-income, uninsured women ages 50 to 65.
- HealthSMART, a service of HMC, offers free skin cancer screenings to the community.
- Hays Home Health & Hospice Center includes services provided in the client's home and in the broader community.

Treatment options are discussed via a video/audio link.

video appointments with KUMC cancer specialists, said Gary Doolittle, M.D., a hematology-oncology faculty member at KUMC, who is one of the pioneers of the teleoncology practice.

The development of the telemedicine concept at HMC is attributed in large part to Robert Cox, M.D., medical director at HMC, who conceived the idea in 1988 and has promoted its expansion into other medical specialties over the years. Hays has become an international leader in a variety of telemedicine applications—from teleradiology to remote ER coverage to "tele" home health.

Over the years, the teleoncology practice has changed to meet the center's needs. Currently, the cancer program has two full-time medical oncologists— Renee L. Plumb, M.D., also a hematologist, and David Beggs, M.D. The program expects to use teleoncology on an as-needed basis, said Plumb, who also serves as medical director of medical oncology.

When the teleoncology practice is needed, the system is in place. Two to four oncology patients may be scheduled for appointments within a two-hour period every week. A special room at Hays houses the necessary equipment and telemedicine system. A remote-control camera allows the oncologist at KUMC to zoom in or out to examine specific areas of the patient's body. A "tele-stethoscope" allows the oncologist in Kansas City to listen to the heart and lung of the patient sitting 280 miles away at the Hays Cancer Center. Laboratory results, X-rays and CT scans, and patient records are transmitted to KUMC by fax and computer.

The teleoncology physician travels to the Hays Cancer Center at least monthly to see patients face-to-face. When possible, patients are first seen by the physician during one of these on-site visits, with remaining encounters online. So far, said Cox, he has found no evidence of errors in any of the diagnosis and treatment decisions made through the teleoncology clinic.

Oncologists at KUMC and oncology nurses at Hays are trained in basic operation of the teleoncology equipment. The oncology nurse needs to know how to dial in and connect into the system. The nurse must know how to operate the equipment, for example at the oncologist's request, zoom in the camera on a specific lesion or area of concern on the patient's body for better assessment, and assess the patient's heart and lung via the electronic stethoscope.

The oncologist may ask the nurse to do other assessments, such as check for enlarged lymph nodes or spleen. The oncologist observes the assessment, and the nurse communicates what he or she is finding.

"It is critical that both clinicians communicate well," Cox said. "A trust must be developed so that the oncologist knows exactly what the nurse means as she shares her finding with the physician."

After the patient assessment, a treatment plan may be developed with a follow-up or return visit planned. The nurse will then coordinate the plan, making sure the oncologist receives reports of results and progress. The nurse becomes "a life-line" between the patient and the oncologist, Cox said.

How well do insurers reimburse HMC for providing teleoncology services? Doolittle pointed out that Medicare currently pays, but with limitations, for video consultations. Coverage for telehealth services will change this year under newly passed legislation, the Benefits Improvement and Protection Act of 2000 (BIPA). Effective October 2001, Medicare will reimburse all rural health sites for the technical and professional components of health care delivery. While private health insurance coverage of teleoncology services currently varies, this coverage may also change in the near future to be more in line with the new Medicare reimbursement policy, Doolittle added.

Regardless of Medicare reimbursement, Cox pointed out an overriding economic advantage to using teleoncology. "By providing patient access to the physician, we are keeping the patient at our center. We then become the provider of choice for the patient's medical care. When a diagnosis is made, a treatment plan established, and a follow-up plan in place, the service becomes reimbursable."

While the start-up costs (such as purchase of equipment and support of network) for HMC's telemedicine system were about $100,000 for one site in 1990, the estimate now is about $40,000 per site, Cox said. HMC has received a variety of federal and state grants and state subsidies over the years to set up this program and other telemedicine systems across 16 communities in Kansas. The system is also used for interactive video conferencing, such as continuing education courses for clinicians.

"The most critical component of a successful telemedicine program is partnership," Cox said. "Partnerships for funding are important," he said, "but even more critical are clinicians working together in this extension of medicine, building complete trust in the skills and communications of each partner. Without this close relationship, neither side can become comfortable that the telemedicine encounter has been complete."