

## St. Luke's Cancer Center in Bethlehem

### Comprehensive Care in a Community Hospital

**S**t. Luke's Cancer Center in Bethlehem, Pa., has combined a progressive melanoma treatment program, state-of-the-art radiation oncology equipment, and a wide range of cancer rehabilitation services to provide comprehensive cancer care in a community hospital setting. The Cancer Center is part of the St. Luke's Hospital and Health Network, which owns and operates four hospitals (in Bethlehem, Allentown, Quakertown, and Coaldale, Pa.), and has affiliations with two more (in Palmerton, Pa., and Phillipsburg, N.J.). The network is also linked to other cancer centers throughout the country, which provide second opinions and consults on complex cases. The result is that residents of the six counties St. Luke's serves have access to some of the best oncology care Pennsylvania has to offer.

A good portion of Pennsylvania's best exists at St. Luke's. Both sentinel lymph node biopsy and radiofrequency ablation are available, plus a full range of immunotherapy services, stereotactic biopsy for suspicious breast lesions, and high-dose brachytherapy. In 2000, the hospital was listed as a benchmark institution for ICU care by *Modern Healthcare* magazine in its "100 Top Hospitals: Benchmarks for Success."

The Cancer Center, which opened in 1986 and relocated to the East Wing of the Bethlehem facility in 1999, has its own entrance and lobby and has consolidated all services into one, easily accessible area. There are 34 single-bed rooms for inpatients, plus a freestanding hospice for the terminally ill.

"Eighty-five percent of cancers are treated in the community hospital setting," said Lee B. Riley, M.D., Ph.D., the center's medical director. "It is in the patient's best

interest to receive his or her medical care as close to home as possible. That's why the St. Luke's Cancer Center strives to ensure that our patients receive the same high-quality care that is provided at major university cancer centers."

#### CUTTING-EDGE PROGRAMS

Jim Goetz, RT(T), radiation therapist and supervisor of the department of radiation oncology, thinks St. Luke's is meeting its goal of providing high-quality care. His department houses a Varian 2100 EX linear accelerator with a 120-multileaf collimator, and the center will add a second Varian unit and a PET scanner before the end of the summer. Although the equipment is state of the art, the hospital has gone even further, combining Varian's Varis patient management system with its CADPlan treatment planning system to produce an outstanding level of patient care throughout the radiation therapy process.

Here's how the process works. According to Goetz, when patients come to the center, a secretary schedules all their appointments (including initial simulation, treatment start date, cone-down simulation, cone-down start date, and all treatment times) right at the front desk using Varis. When the therapists meet for the initial simulation, the CADPlan System comes into play. Using a graphics accelerator card, CADPlan fuses CT scans, MRI scans, and PET scans into one, three-dimensional image that can be rotated in any direction on a 21-inch monitor. The therapists can view the tumor from all sides, and color wash it with different dose options simultaneously until they decide on the optimal treatment program. Then they enter the program into the patient's electronic chart in CADPlan. When the patient comes

in, the therapist pulls up the chart, and CADPlan automatically programs the treatment plan into the machine, eliminating operator error. Varis' Record and Verify feature ensures that the therapist follows the preset plan to the letter. If the patient is incorrectly placed, or the table height or field size is wrong, the machine will not turn on to deliver treatment. Everything the therapist does is recorded and entered into the patient's chart electronically for physician review. After treatment, a charge screen appears, and no further therapy is permitted until all the billing information on the last patient is entered and submitted to the payer.

"We are very happy with the quality of care we can give our patients," Goetz said. "It's a credit to this hospital that we have such advanced technology."

The most specialized program at St. Luke's was created last year for melanoma. Riley, a melanoma specialist, has put together a variety of progressive treatments previously available only in urban centers such as New York, Philadelphia, and Washington, D.C. The standard therapies of surgery, chemotherapy, and radiation are combined with sentinel lymph node biopsy and immunotherapy with interferons and high-dose interleukin-2. In a process called mole mapping, a computer places close-up images of moles and suspicious skin lesions onto a baseline standardized body sector map, which is compared with new maps taken at follow-up visits. St. Luke's also participates in clinical trials of melanoma treatments, and these experimental therapies are available to qualified patients as well.

#### FOCUS ON PATIENT SERVICE

The high priority St. Luke's places on making the cancer recovery

*St. Luke's Hospital in Bethlehem opened in 1872 and is the oldest hospital in the Lehigh Valley area of eastern Pennsylvania. It is part of the 1,036-bed St. Luke's Hospital and Health Network, which has hospitals in five locations in Pennsylvania and one in New Jersey.*

#### **VITAL STATISTICS**

Total hospital bed size: 542  
Dedicated cancer unit beds: 34  
Number of new analytic cancer cases seen per year: 1,106  
Managed care penetration in the state: 45 percent

#### **SELECTED PATIENT SUPPORT SERVICES**

- Lymphedema care
- Lifestyle management where exercise physiologists work one-on-one with patients to increase



their strength and fitness

- Breast Prosthetic Fitting Service
- Support groups and individual counseling from a specially trained cancer counselor on either an acute or long-term basis
- T'ai Chi and yoga classes,

and courses on the benefits of spirituality

- A Look Good/Feel Better Program run by the local chapter of the American Cancer Society
- Music therapy for radiation oncology patients

process as easy as possible is clear. The Outpatient Infusion Center is open seven days a week. The rehabilitation and psychosocial support programs are outstanding. A Palliative Care Team will be added to support services in 2001, along with optional alternative and complementary therapy programs. Genetic counseling is available, and a specialized wound recovery program is offered at the St. Luke's hospital in Quakertown.

The rehabilitation and psychosocial programs' non-reimbursable components are funded by an open-ended grant from the Women's 5K Run (which sponsors a local run/walk to benefit breast cancer treatment), plus projects put together by employees such as their recent staff-made quilt raffle. Programs such as Lifestyle Management and the counseling

service were created solely to assist patients, but the Lymphedema Care Program and Breast Prosthetic Fitting Service were instituted not only for patient convenience but to encourage in-system utilization and all that entails for generating revenue.

Everyone on staff is trained as an advocate to help patients understand their treatment and make quality-of-life choices. Carol Kuplen, M.S.N., R.N., director of network cancer services at St. Luke's, said that the nurses in the Comprehensive Breast Program are good examples of this commitment to emotional well-being. A comprehensive breast care nurse meets each patient when the patient arrives for biopsy. Whether the biopsy is benign or malignant, the same nurse will be part of the patient's care until treatment is no

longer needed. The comprehensive nurses run the Breast Prosthetic Fitting Service (helped by Spanish-speaking assistants), so women can be fitted in privacy by someone they already know. And if patients enter the freestanding or home care hospice programs, their comprehensive nurse will stay in touch with them there.

St. Luke's Cancer Center has committed itself to continuous growth. Upcoming projects include increasing the number of clinical trials offered, boosting community education about the benefits of cancer screening, and adding the alternative and complementary medicine program. The level of care at St. Luke's is usually offered only at institutions in urban areas. Residents of the Lehigh Valley are fortunate to receive such excellent services so close to home. ☐