

'MOUNTAIN MODERN'

Lodge-like facility delivers advanced care

Article by Amy Eagle • Photos by Kyle Dreier Photography

Connecting corridors flanking the hospital's main entry lead to the Robert F. Thomas Medical Office Building and the Dolly Parton Center for Women's Services.

Ellen Wilhoit, FACHE, president and chief administrative officer of LeConte Medical Center, Sevierville, Tenn., calls the design of the medical center's replacement hospital "Mountain Modern." Sevierville is located at the edge of Great Smoky Mountains National Park in an area of rustic natural beauty. The design includes indigenous stone, wood and wood-look materials that give the hospital a lodge sensibility suitable to its mountain home, and a contemporary, sophisticated polish reflective of advanced medical care. "We wanted to create a new, really positive image" that goes beyond the medical center's small community hospital roots, Wilhoit says.

The new medical campus includes a hospital, women's center, medical office building (MOB) and cancer center. It was designed through a collaborative effort of BarberMcMurry architects, Knoxville, Tenn., and Earl Swensson Associates Inc. (ESA), Nashville, Tenn. >>

PROJECT OVERVIEW

PROJECT NAME: LeConte
LOCATION: Sevierville, Tenn.
TOTAL FLOOR AREA (IN SQUARE FEET): Hospital (194,940); Medical Office Building (30,627); Women's Center (32,285); and Cancer Center (16,125)
NUMBER OF FLOORS: Three
NUMBER OF BEDS: 79
PROJECT COST: \$115 million
CONSTRUCTION COST: \$74.8 million
GROUNDBREAKING: May 2007
OPENING: February 2010

PROJECT TEAM

OWNER: Covenant Health
ARCHITECT: BarberMcMurry architects (architect of record) and Earl Swensson Associates Inc. (health care design consultant)
GENERAL CONTRACTOR: Rentenbach Constructors Inc.
INTERIOR DESIGNER: Earl Swensson Associates Inc.
MEP ENGINEERING: I.C. Thomasson Associates Inc.
STRUCTURAL ENGINEERING: KSi Structural Engineers
MEDICAL EQUIPMENT PLANNING: Balfour Resource Group
INFORMATION TECHNOLOGY: Smith Seckman Reid Inc.
FOOD SERVICE DESIGN: Inman Associates Inc.
PHARMACY DESIGN: MMI Systems
LABORATORY DESIGN: Scott Laboratories Inc.



CLEAR DIRECTION
Visibility of the public elevator as well as waiting and reception areas enhances wayfinding immediately upon entering the lobby.



Hospital takes cues from its surroundings

The replacement facility at LeConte Medical Center, Sevierville, Tenn., is located directly across the street from the previous hospital building on 70 acres that give the medical center substantially more room for expansion than its former, landlocked 13-acre site.

“By East Tennessee standards, it’s a pretty flat site,” says Mike Driskill, AIA, LEED AP, project manager, BarberMcMurry architects. The Sevierville area, in the foothills of the Great Smoky Mountains, is generally hilly, but the former manufacturing site was “unusually friendly” to construction, Driskill says.

Design architect Earl Swensson Associates Inc. positioned the hospital to take advantage of views available from the site. The front entry is oriented toward nearby Mount LeConte. The hospital tower is designed to allow views of mountains or the local airport from every patient room. The infusion treatment area of the medical center’s freestanding cancer center also features mountain views.

During construction, the builders erected on-site mock-ups of the hospital’s exterior walls to test different materials. The roughly 10-by-12-foot wall sections included as many exterior details — such as windows and copings — as possible to determine the best selections, says Driskill. He adds the project’s detailing changed significantly as a result of what the team learned from the mock-up walls.

Cast-stone copings were changed to a metal material of the same color that cost less, was easier to install and looks the same from ground level. The original design also called for a local, rounded river rock in place of the indigenous cut stone used in the final building. Driskill says trying to build with river rock to achieve both aesthetically pleasing and water-tight results proved difficult. “The change we made in the stone was particularly beneficial,” he says. ■



Lighting provides a softened accent to both the entry canopy and the natural stone utilized on the exterior, which is indigenous to the East Tennessee region.

BarberMcMurry architects took the lead role in designing the women’s center and MOB, while ESa led the functional planning and design of the hospital and cancer center.

Convenient flow

The hospital’s main entrance opens onto a two-story lobby featuring the same natural stone used on the building’s exterior. Wood-look laminate columns and resin panels with birch accents add to the natural feel.

“The surrounding area is just beautiful. We wanted to bring in those types of materials, the stone and the wood,” says Jennifer Satterfield, IIDA, LEED AP, interior designer, ESa. A palette of soothing blue, green and terra cotta enhances the natural look throughout the hospital.

The lobby rotunda features a custom light fixture of contemporary design centered above a medallion pattern in the flooring. A reception desk, gift shop, dining area and chapel all are located near the entrance. “Everything for the public [is] right there at their fingertips,” says Satterfield.

Enclosed walkways off each side of the entry lead to the women’s center and MOB. To the right of the main lobby, there is a diagnostic waiting area for imaging and related services; to the left, is the surgical waiting room.

Patients are processed and escorted to the appropriate care area according to a specific flow pattern. The design is meant to separate public, patient and staff circulation routes to minimize cross traffic, explains Harold Petty, AIA, director of medical design and ESa’s principal-in-charge on the project.

Expanded, efficient care

The hospital expects to see 50,000 patients in the emergency department (ED) this year, with about one-third of

them being tourists at the national park and nearby towns of Gatlinburg and Pigeon Forge.

At the previous hospital, the volume of emergency care was about 40,000 patients per year in an ED built for 17,000. “That was one of the key reasons we needed a new facility,” Wilhoit says.

In addition to being larger, the new ED has private treatment rooms for increased confidentiality, safety, security and comfort. A decontamination area addresses the newer threat of bioterrorism.

The ED is laid out for efficient patient flow. “Well-defined paths separate people coming in from people coming out,” explains Craig Holloway, AIA, ESa project manager. Adjacent surgery and radiology departments enable patients to be moved swiftly to either area. A patient transport elevator located just outside the ED facilitates transfers to the intensive care unit.

The emergency, surgery and radiology departments are positioned on the periphery of the first floor to allow future expansion of any of these departments without compromising other areas.

Medical-surgical care

The facility’s patient units are arranged in two L-shaped wings with a central elevator hub and support core.

The support core includes physician dictation rooms and similar staff workspaces, as well as secure medication storage and dispensing. A business station is located on each side of the elevator core to provide a work area for the unit secretary and such support members of the hospital care team as dietitians and therapists. There is a decentralized nurse station and supply area in each patient unit wing.

For additional privacy, the patient rooms feature inboard



FLEXIBLE COMFORT

The birthing unit's LDRP rooms provide warm, comfortable, functional environments that are easily adaptable for the delivery process.

toilets that provide a buffer between the patient bed and the corridor, says Holloway. The design also allows for larger exterior windows to maximize views and natural light.

Laminate panels, designed with input from hospital staff, improve the look and functionality of the headwall in the patient rooms.

The custom-built units were a "relatively low-cost item," Holloway says, that "add a lot of warmth to the room as well as provide an opportunity to organize a lot of the

chaos that's typically on the headwall."

Rather than place a nursing computer on an ergonomic arm, the team designed a narrow cabinet about six inches deep that can be closed and locked to store the computer securely and essentially out of sight.

Medical mission

According to Wilhoit, the facility is attracting new physicians, including some who practice in specialties the hospital previously had not been

able to offer. She credits much of the success of the project to the support of the hospital's foundation and Covenant Health, the Knoxville, Tenn.-based, community-owned health system that includes LeConte Medical Center.

"Most hospitals our size wouldn't have the facility we have without these extra resources," Wilhoit says.

Holloway, who — like several members of the project team — has family in the Sevierville area who use this hospital, is grateful for the

opportunity to serve patients through design.

He says, "We may not be able to be there on a daily basis ministering to people and being a part of that medical mission ... but we can create spaces that allow people to do that work." **HFM**

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Amy Eagle is a freelance writer based in Homewood, Ill., who specializes in health care-related topics. She is a regular contributor to *Health Facilities Management*.



Flanking buildings complete care picture

The hospital facility at LeConte Medical Center is flanked by the Dolly Parton Center for Women's Services and the Dr. Robert F. Thomas Professional Building. Thomas served as a minister and physician in Sevier County, Tenn., where the hospital is located, for many years beginning in 1926; country music star Parton was among the many area babies he delivered. The hospital foundation, for which Parton serves as honorary chair, also is named for Thomas.

The Thomas and Parton buildings are connected to the hospital by corridors that lead off the main lobby. The services in these buildings do not require the same institutional occupancy level of construction necessary for inpatient care. Locating these services in buildings designed for business occupancy "saved quite a bit of money," says Mike Driskill, AIA, LEED AP project manager, BarberMcMurry architects.

The two facilities are nearly identical in size and exterior design, featuring the same materials as those of the hospital. The lobby finishes of each building also are used in the hospital's main lobby to create a seamless transition. Services offered in the women's building include mammography, biopsy, bone density exams and a sleep disorder center. Physician offices are located in the professional building.

The medical campus also includes a freestanding cancer care facility, the Thompson Cancer Survival Center, that provides infusion and radiation therapy services. Previously, area patients had to travel about an hour each direction for this type of treatment, according to Ellen Wilhoit, FACHE, hospital president and chief administrative officer. Wilhoit says a young woman recently thanked her for the new center's construction and said the time saved by local treatment had enabled her to keep her job. "That was just very gratifying to know that we do make an impact in so many ways," says Wilhoit. ■



The health unit coordinator station of the Dolly Parton birthing unit features a photograph of its benefactor, while birch twigs sandwiced within composite inlay panels grace the front of the desk.

SPEC SHEET

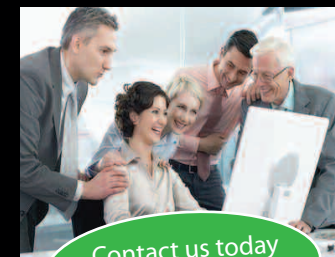
PRINCIPAL DESIGN MATERIALS Carpet and carpet tile: Shaw Ceiling: Armstrong World Industries **Curtainwall framing:** Kawneer **Door hardware:** Dorma and Ingersoll Rand **Doors:** Ideal Door (plastic laminate) **Flooring:** American Biltrite (vinyl plank and stone non-wax), Armstrong World Industries (sheet vinyl and vinyl composition tile) and Teknoflor (wood-look vinyl) **Glass:** Tempered Glass Inc. **Lighting:** Challenger Lighting Company Inc. (custom pendant and sconces) **Millwork:** Johnsonite **Paint:** Sherwin-Williams Co. **Plumbing accessories:** Symmons Industries Inc. **Plumbing fixtures:** Bradley Corp. and Zurn Industries **Quartz surfaces:** Cambria **Resin panels:** 3form Inc. **Roofing:** Firestone Building Products **Signage:** Signcraft Inc. **Tile:** Crossville Inc. **Wall coverings:** Eykon and Maharam **Wall protection:** Spectrim Building Products **Window treatments:** MechoShade Systems Inc. **PRINCIPAL FURNISHINGS** Cafeteria seating: Steve Ward & Associates Inc. **Cafeteria tables:** Symphony Tables **Casework:** Case Systems Inc., DuPont and Wilsonart International **Conference tables:** JSJ Corp. and Kimball International **Office desks, files and shelving:** Kimball International **Lounge and patient room seating:** Legacy Furniture Group Inc. **Office seating:** Chromcraft Contract **Patient beds:** Stryker **Patient over-bed tables:** Amico Patient Care Equipment **Woodworking:** Marlite and Rulon Co. **MAJOR MEDICAL EQUIPMENT** Computed tomography, magnetic resonance imaging, radiography/fluoroscopy and radiology equipment: GE Healthcare **INFRASTRUCTURE** Boilers: Cleaver-Brooks **Building management system:** Johnson Controls **Chillers:** McQuay International **Clocks:** Primex Wireless **Electrical equipment:** Square D by Schneider Electric **Elevators:** ThyssenKrupp Elevator **Fire safety:** Notifier by Honeywell International Inc. **Generator:** Caterpillar **HVAC (misc.):** Enviroco, McQuay International, Ruskin Co. and Titus **Pneumatic tube system:** Swisslog

Information provided by BarberMcMurry architects, Earl Swensson Associates Inc., LeConte Medical Center and Rentenbach Constructors Inc.

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