

Green Design Helps Children, Families Heal

By LOIS SECHRIST

Ashley needed a place to walk and reflect during eight days of waiting while Hudson, her 4-year-old son, lay in a hospital bed after a car accident left him with a traumatic brain injury. The child and his mother (names changed for privacy purposes) were in the intensive care unit at Dell Children's Medical Center of Central Texas in Austin.

Rather than pace back and forth in a waiting room or up and down long, harshly lit hospital corridors, Ashley found she could step outdoors to a courtyard only a few yards from the ICU.

"The sun was shining and the wind was blowing," Ashley said. "At that moment, I knew that no matter what, Hudson was going to be fine."

She was right. Hudson progressed and recovered. His care reflected a properly managed system of medical resources, and Ashley's spiritual renewal occurred partly because architects designed access to sunshine and fresh air for people experiencing stressful, life-changing situations.

HEALING, WELL-BEING AND SUSTAINABILITY

By using the most appropriate medical resources while also connecting people with nature, Dell Children's caregivers promote healing and contribute to the well-being of all. Sustainability, also, is part of the culture. Staff and administrators understand how their efforts

help the environment and increase their integrity as holistic caregivers. The simple act of recycling batteries or printer cartridges is a microcosm of the mindful, intentional and respectful care they give to patients and their communities.

Taking care of the environment and preserving natural resources is a theological and practical extension of compassionate patient care passed down through the centuries by the institution's founders, the Daughters of Charity. Dell Children's, part of Seton Healthcare Family of the Ascension Texas Ministry Market, continues to embrace and practice the values and principles of the Daughters of Charity of St. Vincent de Paul, formed in the 17th century and one of the Participating Entities of the Ascension Sponsor. Seton Healthcare Family is named after Elizabeth Ann Seton, the first American-born Catholic saint.

The Daughters of Charity began their work in Austin in 1902. The order subscribed to a "waste not, want not" principle while caring for people who

are poor and vulnerable. Today, there's a renewed emphasis of Catholic social teaching expressed in the importance of taking care of others and all creation.

"A sense of deep communion with the rest of nature cannot be real if our hearts lack tenderness, compassion and concern for our fellow human beings," wrote Pope Francis in his 2015 encyclical letter, *Laudato Si'*. "Everything is connected. Concern for the environment thus needs to be joined to a sincere love for our fellow human beings and an unwavering commitment to resolving the problems of society."

Stories of healing — similar to Ashley's and Hudson's — are lived out on a daily basis at Dell Children's, where the harmonious balance of many elements provides high-quality patient care as well as support to families and friends.

"While a friend of my daughter's was hospitalized with a significant illness, the family just wanted to go outside," said Deb Brown, vice president of patient care services and chief operating officer/chief nursing officer at Dell Children's. "We told them they could visit the healing gardens. They were able to walk through the garden and feel a sense of respite, which improves both emotional and health outcomes. That's something we give children and families that not every hospital can offer."



Andrea Eberbach

The building is designed so patients, families, friends and staff are no farther than 30 feet from a source of direct or reflected natural light. An outdoor labyrinth and a children's sensory garden are accessible a few steps away from the building.

"Everyone assumes a hospital is going to be a dark, antiseptic place," said Michele Van Hyfte, manager of environmental stewardship for Seton Healthcare Family. "When they experience a completely different kind of hospital like Dell Children's, they realize the building should be one of the reasons you feel better when you leave. Once they experience this, it becomes an expectation."

Most health care administrators wouldn't rank environmental stewardship or design as one of the sector's most pressing priorities. Issues of quality, cost, access and government regulation dominate agendas at most health care institutions. Brown acknowledged the transition to "green" practices in health care can be a formidable challenge.

"We are continuing to care for children in the highest quality way," said Brown. "We're also trying to drive down costs by being sustainable."

One example: Pulse oximeter probes — sensors placed on a fingertip or a foot to monitor oxygenation in the blood — are now reprocessed following FDA guidance. Dell Children's is compensated for reprocessing; the practice is widely adopted by Ascension hospitals to reduce costs and keep disposable products out of landfills.

"Our environmental stewardship success is because of our culture," Brown said. "If you talk to our physicians and associates who have been here more than a few months, they will tell you environmental stewardship is just what we do. We had to overcome obstacles, but I think we've made good decisions."

"We have managers who come to me with great initiatives that we are able to implement. That's like working with a dream team and is very refreshing. We have an engaged workforce that wants to do the right thing."

THINKING 'GREEN'

In addition to altruism and Catholic social teaching, Van Hyfte believes a number of other factors influence leaders to think "green." They include

economic pressures and increasing government regulations. Plus, health care providers are growing increasingly aware of the effects their practices have on the health of their patients and the communities they serve.

"There's a big space between the theory of the care of creation and how it applies to the business model," Van Hyfte said. "It's a long journey. There are a lot of different people who have to be convinced along the way. You need to unite people so they can see how they can acknowledge, function and embrace each other. That's the tricky part."

The Daughters of Charity's emphasis on ecological practices and Catholic social teaching

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aligned with Van Hyfte's values when she joined Seton Healthcare Family. A founding member of the U.S. Green Building Council chapter in Austin, she also is an environmental advocate away from work.

"As a young architect and even before college and graduate school, I was curious about the impact of the built environment on nature," Van Hyfte said. "I looked at the materials used, why they were chosen and how they affected the people in the community after a building went up or was taken down."

The first phase of the Dell Children's campus was built in 2005 on a 722-acre site once used as an airport. Many elements of the airport were reused, including 47,000 tons of runway asphalt that became the base of a parking lot and building backfill. Building materials included high-performance window systems, concrete with 30 percent fly ash in lieu of Portland cement, compressed wheat board in millwork, and solvents, adhesives and paints with low VOCs (volatile organic compounds).

A combined heating power plant with a gas-fired turbine provides all of the facility's electrical power. It is completely off Austin's power grid, and it achieved 75 percent energy delivery effi-



ciency, compared to 30 percent for typical facilities on the grid. Rooftop solar panels and purchases of renewable energy credits from a wind farm further reduce reliance on fossil fuels.

The 169-bed, 473,000-square-foot facility became the world's first LEED (Leadership in Energy and Environmental Design) Platinum-certified hospital in 2008 before LEED-HC (health care) was launched in 2011 as a distinct standard.

Brown and Van Hyfte joined Dell Children's after the hospital opened and made a connection through their mutual commitment to environmental stewardship.

"We immediately decided we were going to do things even better," Brown said. "We started planning the best ways to bring our front-line associates and physicians together and engage them in what environmental stewardship really is."

CONSTRUCTION AND DESIGN

The completion of the South Tower in 2013 was a benchmark. The project added 72 patient rooms and 83,000 square feet of space.

"The approach to this project was to build it as well as or better than the original hospital," said Van Hyfte. "Attaining LEED Platinum was an expectation, and we raised the bar by attaining the LEED for Healthcare rating, which was more stringent. We were successful because it was a team effort. Deb Brown and Sr. Teresa George, the former president and chief operating officer, ensured we would have the support we needed."

Dell Children's shares and promotes best practices and methods with other health care ministries throughout Ascension, the nation and the world. The Ascension Facilities Resource Group has developed planning, design and construction standards incorporating sustainable design criteria for acute care and ambulatory facilities. An expansion project of St. Vincent Fishers Hospital in Fishers, Indiana, received LEED certification in 2015. Another Seton facility under construction, Dell Seton Medical Center at the University of Texas in Austin — a 1-million-square-foot teaching hospital — is planned to achieve LEED certification. "We do see progress, and we do see sustainability being embraced," Van Hyfte said. "While there is a demand for evidence and data, some criteria are qualitative and not quantitative,

such as the user experience of visiting and working in a green building."

In addition to design and construction, Dell Children's and Ascension are working on purchasing contracts with furniture manufacturers practicing environmental stewardship in their own companies. Two Ascension partners, Herman Miller, Inc. and Haworth, Inc., create products contributing to a healthy, sustainable natural environment while providing economic value.

Brown and Van Hyfte spend many hours giving tours of the facility and sharing lessons they learned during the last few years. Both believe a critical first step is changing the organization's culture by influencing the hearts and minds of key leaders at all levels.

"You need a champion or a group of champions to lead this," Brown said. "Having a grass-roots movement is really important. I could have preached all day, every day, about why this is important and necessary. But it is our front-line staff, our managers and physicians who say this is the right thing to do."

The culture of environmentalism found in Austin and at the University of Texas provides affirmation for Dell Children's work, as well as expectations.

"Austin was green before green was cool," said Van Hyfte. "We have a long history of taking care of our natural resources and, therefore, the health of our citizens. So our work at Dell Children's goes beyond people's expectations because it's embedded in the culture. It's simply what we do here."

From Austin to the Vatican, there's an urgency to examine how resources are used, how they affect all human beings and to take immediate action.

"We must not think that these efforts are not going to change the world," Pope Francis wrote in *Laudato Si'*. "They benefit society, often unbeknown to us, for they call forth a goodness which, albeit unseen, inevitably tends to spread. Furthermore, such actions can restore our sense of self-esteem; they can enable us to live more fully and to feel that life on Earth is worthwhile."

LOIS SECHRIST is manager of environmental stewardship for all Ascension acute care hospitals and systemwide functions. She is based at the system office in St. Louis.

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