DESIGN FOR RETIREMENT AND HEALTHCARE ENVIRONMENTS REPORT

The design of specialized healthcare and retirement facilities, driven by the demographics of an aging population, is a growing area of professional practice. Therapeutic or healing gardens and green spaces of many kinds are becoming key elements in the design of hospitals, assisted living facilities and nursing homes. The ASLA has a Therapeutic Garden Design Professional Practice Network (PPN) dedicated to the study and design of outdoor spaces for respite and healing. (http://host.asla.org/groups/tgdpigroup)

On April 12, 2006 Landscape Forms hosted a roundtable of twenty three professionals including architects, landscape architects, planners, interior designers, physicians, and social workers to discuss design for healthcare and retirement environments in general and therapeutic gardens and green spaces in particular. The meeting in Kalamazoo, Michigan was moderated by Katie Weeks, Senior Editor of Contract Magazine.

Participants identified a number of key programming and design issues in the creation of high-quality healthcare and retirement facilities. First is a holistic approach that values outdoor as well as indoor spaces as vital to the overall appeal of the facility and its ability to meet patient and resident needs. This approach is based on mounting medical evidence therapeutic gardens in facilities for the ailing and aging support physical, mental and spiritual healing and well being. Documentation of their benefits comes from a variety of sources, including the United States Department of Veterans Affairs. As it restructures its vast system, the largest not-for profit healthcare system in the nation is including therapeutic gardens among the complimentary treatments it provides in an effort to improve medical outcomes, shorten the duration of hospital stays, reduce patient stress and cut costs.

Today, evidence-based design draws on these findings and informs best practices in healthcare and retirement facility design. Patricia Malick, Principal, Array Healthcare Facilities Solutions of King of Prussia, PA explained, “As designers we’re able to do a better job because of the buzz that has surrounded evidence-based design and studies such as those coming out of Texas A&M and Robert Johnson and Johns Hopkins. We’ve been passionate about these things for years, but within the last five years there’s been a revolution. Now we’re able to cite business models and returns on investment and documented improvement in medical outcomes. Our clients have read about it in the Wall Street Journal and become much more educated and that has allowed us to take them to the next level.”

That next level includes building design recommendations into industry guidelines. Jerry Smith, ASLA, LEED AP, is a member of the group rewriting the LEED version 2.2 Green Guide for Healthcare. He reported, “We identified outdoor spaces as important to the program and set a five percent requirement for outdoor places of respite, with two percent of that net usable program area being set aside for staff only. We also identified as a new area in the environmental quality section of the guide, places of respite that have direct views to nature or to these outdoor spaces.”

Outdoor spaces in healthcare and retirement settings include passive and restorative green spaces as well as highly programmed therapeutic and healing gardens. In acute care facilities, it's not always possible for patients to physically access outdoor spaces but as LEED recommendations recognize, they're still important. Debra Axelrood, ASLA, Harley Ellis Devereaux of Southfield, Michigan explained, "It's critical for patients to have spaces that they can look out onto, as well as areas that they can escape to if they're able. There have been studies which show that access to natural light and views to the outside improve the outcomes for patients."

In retirement communities and assisted living facilities, the goal is to provide settings and activities that encourage socialization and enable residents to continue to pursue life-long interests. "In our projects we build in elements such as community gardens and trails," reported Jack Carman, FASLA, Design for Generations, LLC, Medford, New Jersey. "So in places like Medford Leas, getting out into nature is part of the culture. They have committees for birding, nature trails, and invasive plant control and an arboretum that provide a connection to nature at whatever level residents can participate to stay actively involved."

Patricia Malick called attention to another reason that green space matters. "As designers we have to make sure that we set a positive first impression, from the time you drive onto the campus to every portal in between. The environment sends such strong visual and cognitive cues about the quality of care that can be expected, about credibility and competence."

The second critical issue identified by participants is the necessity for deep and informed understanding of the needs of users from an experiential point of view, on multiple levels: the physical, psychological, emotional and spiritual. Sickness and aging effect profound changes in human experience. Roundtable participants agreed that solutions to facility planning and products must come from close observation in real situations.

For the aging, the emotional dimension can have an especially profound effect on health and longevity. Jake Friend, ASLA, Director of Land Planning at THW in Atlanta, GA explained, "The key to successful community planning is creating spaces where people can interact on an intimate level — the spaces created must engage people to interact with each other. Most often we live within the silos of ourselves. Socializing with other people enriches our lives, keeps us healthy and extends our lives. It's not just the materials, the plantings, the lighting and all the technical things we must think about in planning spaces. In the end it's about human vitality and how we create spaces that set the stage for people to engage in the daily act of living."

The same is true of older patients in hospital environments. “The small interactions with families really matter,” declared Sonya Odell, Director of Strategic Healthcare Planning at Leo A. Daly in Dallas, TX. “You tend to find places for those activities in areas for children but we don’t think about it as much for adults. And it’s probably even more critical where you have an infirm adult who doesn’t get much socialization. So we need to build in little play or conversation areas to relieve stress.”

In hospital and rehab settings, participants cited the need for design that better supports recovery and reintegration. “Rehabilitation isn’t just about squeezing rubber balls and pulling rubber bands” Friend continued. “Healthcare professionals have told us that they need better facilities that will allow their patients to become self sufficient. They need equipment and facilities that replicate real life conditions — props that will allow patients to open a real car door, walk up real stairs or push an actual shopping cart — but the facilities aren’t there yet. We must place ourselves in those situations and listen to the medical professionals. This will help us provide better design. We can’t get this information from a book.”

Participants agreed on the importance of providing as much patient and resident control over daily activities and wayfinding as possible. Dr. Joanne Westphal is a medical doctor and landscape architect who teaches at Michigan State University. “What makes a great facility is the ability of the patient, staff or family member to control the decisions that affect their movements and choices as they draw from the resources around them,” she said. “I think that designers are so creative that we can improve our products just by moving ourselves through the various roles of the individuals using a facility.” Westphal had another good reason for asking designers to become immersed in the environments for which they design. “We’re interfacing with medical professionals whose training is based on competency, consistency and predictability of outcomes. The design arts that celebrate creativity are not necessarily equated to competency. Some of the most fundamental ways we locate and organize space may look perfectly fine to us with our full capacity. But if you place yourself in the position of the person who’s just come out of surgery and move through the basic necessities of life in that room, you’ll have a whole different perspective on what really concerns the individual. You need to walk through these protocols to understand what the opportunities are. You’ll have a higher predictive capacity in the long run that you will facilitate the outcomes that those treatment protocols are trying to achieve. So you can bring your practice up to the same level of competency that physicians and other healthcare professionals expect from their training.”

Sonya Odell recently left a position at a large medical center to join a design practice. “I’m still thinking like a user,” she said. “One of the things that interested me as we started a project was the lack of design firms’ requests for information essential to the design solution. Very few asked for a tour of the facility or operational information on maintenance. They didn’t inquire what functions this building might be used for in the future, or the location of the clinic in relationship to other services. These are questions design firms must ask to create the solutions.”

The third big issue identified by roundtable participants is the importance of designing for everyone in the facility. Not just the patient or resident, but for families and staff as well. “You’re not only designing for the person who has the need, but for those who are supporting that individual. So there’s a more universal aspect to the design,” explained Dino Lekas, RLA of JJR in Ann Arbor, Michigan.

“As designers we’ve started to pay more attention to offstage areas for staff, wonderful garden areas for retreat within a facility,” Patricia Malick declared. “We have to look at recruitment efforts and what it costs to replace staff. There’s not really a nursing shortage, there’s a shortage of nurses willing to nurse. It all ties into giving stakeholders an environment in which they feel supported and respected.”

Mark Epstein, ASLA, of Adolfson Associates in Seattle, WA observed, “Research results often come down to reducing stress. The stress reduction shown in studies has resulted from all the things we’re talking about: control, socialization, exercise and interaction with nature. I tend to judge the quality of any design based on how it’s reducing stress for all user groups — patients, staff and families.” He encouraged designers to build features into design that facilitate personal expression and reported, “In one acute care hospital, benches with an integrated slot for a journal, have become good outlets of expression for people who come to visit and have to wait.”

The changes in functional approaches to design for the retirement and healthcare sectors have been accompanied by a change in visual approach as well. An emerging “healing hospitality” model in these environments draws from hotel design to create upscale, non-medical settings and overall ambience. The impetus for this is due in large part to the relatively affluent aging baby boomer generation which brings high expectations and a strong sense of entitlement to its retirement and healthcare decisions. Samantha Roffe, ASLA of Marshall Erdman & Associates in Madison, WI, gave voice to the experience of many designers when she said, “We have developed a design program around providing environments that make people feel comfortable and at home in a context similar to the one they’re accustomed to living in.”

A recurring theme of the discussion was the need for education – of administrators, patients, residents, and staff – on how to use the spaces professionals are designing. "The sites and furniture may be very beautiful, but what happens ninety days from opening? What is the level of maintenance and care and the real use of those spaces?" asked P. Annie Kirk, MLA, ASLA, of Red Bird Design and the Acer Institute in Portland, OR. "It's the occupational therapists, horticultural therapists and social workers who are out there in the spaces we design. It's our responsibility to bridge education of the potential clinical use of these spaces into the design programming at the very beginning of the design process, and to stay involved so we know how well these gardens are working over time. Collaboration is paramount to the success."

Barbara Crisp, AIA, of Underwood + Crisp in Tempe, AZ added, "It's really important to think about how we contractually engage with our clients. We need to create collaborative teams, which include users, architects, landscape architects and manufacturers, to find the right solutions and then follow through to be sure those solutions evolve as things change and grow."

Education was regarded as especially important in the case of gardens and other outdoor spaces, where the concept may still be novel to many facilities. "An integral part of the design is to go back and monitor the garden, see how the elements we've included are functioning and how people are using it," explained Jack Carman. "We've gone back to a senior community and found they put a chair in front of a door so people couldn't go out to the garden because staff didn't know how to use the space. You have to educate staff."

Participants voiced support for sustainable design in retirement and healthcare design. Samantha Roffe advocated for green building techniques, energy efficiency, the use of solar and wind energy and recycling. "We're members of the global community," she said. "We need to consider not only the fine points of design but the global effects of what we're doing."

Finally, the lament sounded at all roundtables to date was heard here, too. "Oftentimes, landscape architects are brought in too late in the process," Jerry Smith declared. "In an integrated design process the landscape architect, architect, interior designer, and engineer are all brought in to meetings with the owner and the user groups at an early stage. The earlier the landscape architect gets involved in the process, the better the outcome is, not just in how these things we have been talking about get implemented but in the heart and the tone of voice that comes through in the design."

What's ahead for this expanding area of design? Dr. Joanne Westphal suggested, "One avenue we could pursue is to look at the human life cycle and begin to anticipate the physical, spiritual, psychological and social changes that take place as one moves from birth all the way through adulthood to senior living. So that we proactively design useful objects, furniture and spaces that address those changes. This is a stand that everyone in medicine could appreciate because they're mired in a reactive system in which they're only remunerated to get people healthy after they're sick. As designers we can actually step up and design spaces that keep people healthy by improving range of motion, muscle strength, coordination and social connection as we age."

Debra Axelrood pointed to the emergence of horticultural therapy as a discipline whose future is tied to the success of therapeutic gardens. "Horticultural therapists are an important link and present huge opportunities for us as landscape architects and designers to get people into nature and outdoor spaces. Right now, there's a lack of understanding and access to that whole field. I'm afraid if people aren't aware of that as a therapy, there won't be a demand for it and people won't go into the profession. Hopefully the field will grow and give us more opportunities." The American Horticultural Therapy Association based in Denver is a resource for information on the profession.

CONCLUSIONS

Roundtable participants raised seven key issues in healthcare and retirement facility design. They included the holistic approach to design that incorporates both outdoor and indoor spaces, with outdoor settings ranging from small, simple enclaves for quiet and respite to large courtyards and gardens designed and programmed for therapeutic activity. Participants talked about the value of evidence-based and patient-centered design. They cited the necessity for on-site observation of residents and patients and direct communication with medical professionals to achieve facility design that supports protocols and desired outcomes. They placed special emphasis on the importance of giving users control over personal tasks, navigation and communication within these settings. They proposed a broad definition of end users in healthcare and retirement settings to encompass patients, residents, family members and staff. Participants agreed on the critical importance of educating caregivers and facility staff on how to best use and maintain special settings designed to support patient care and wellbeing.

They advocated for sustainable environmental practices in the design of facilities. Participants called for a collaborative design and planning process to include design professionals from architecture, landscape architecture and interiors as well as medical professionals and patient representatives to ensure holistic solutions and successful outcomes. And they projected a proactive future role for design in envisioning places and products that support human health and wellbeing through the entire life cycle.

Landscape Forms is a designer, manufacturer and marketer of commercial outdoor furniture and accessories, which has won numerous awards in its 37-year history. The company's products include exterior seating systems, benches, tables and chairs, umbrellas, wheelchair-accessible picnic tables, litter receptacles and planters. In the summer of 2006 Landscape Forms introduced Wellspring, a bench, rocker, table and canopy collection that is the first commercial outdoor furniture designed specifically for retirement and healthcare environments.

GUEST LIST

Debra Axelrood, ASLA
Harley Ellis Devereaux
Southfield, MI

Greg Baughman, ASLA
URS Corporation
Farmington Hills, MI

Jack Carman, FASLA
Design for Generations, LLC
Medford, NJ

Mary Colletti
Beaumont Hospitals
Royal Oak, MI

Doug Craig, ASLA
Norris Design
Denver, CO

Barbara Crisp, AIA
Underwood + Crisp
Tempe, AZ

Mark Epstein, ASLA
Adolfson Associates
Seattle, WA

Jake Friend, ASLA
THW Design
Atlanta, GA

Nancy Goshow, AIA
Goshow Associates
New York, NY

Thomas Hittle, ASLA
Hittle Landscape Architects
Manhattan, KS

P. Annie Kirk, MLA, ASLA
Red Bird Design
Portland, OR

Craig R. Kruckenberg
Hitchcock Design Group
Naperville, IL

Dino Lekas, RLA
JJR
Ann Arbor, MI

Patricia Malick
Array Healthcare Facilities Solutions
King of Prussia, PA

Glenn Miller, RLA, ASLA
Burt Hill
Pittsburgh, PA

Sonya Odell
Leo A. Daly
Dallas, TX

Jon Pate
Carol R. Johnson Associates
Boston, MA

Samantha Roffe, ASLA
Marshall Erdman & Associates
Madison, WI

Korey Schulz, ASLA
Ochsner, Hare & Hare
Kansas City, MO

Jerry Smith, ASLA, LEED AP
Karlsberger Architecture
Columbus, OH

Peter Stojkovic
P & W Architects
Houston, TX

Joseph Waddell, RLA
HLM
Orlando, FL

Katie Weeks
Contract Magazine
New York, NY

Dr. Joanne Westphal
Michigan State University
E. Lansing, MI