

Medical Construction & Design[®]

The Source for Current News, Technology & Methods

BUILDING INTERIORS FEATURE

MAY/JUNE 2007
VOLUME 3, ISSUE 3

inside the trends

Culture and Lifestyle:
The Impact on Healthcare
Environments

GOING GREEN:
DECISIONS IN A
STATE OF FLUX

Emergency
Preparedness
How Ready Are You?



IoA Oncology Care Chair

Healthcare Innovations Focus on the Individual and Patient Control

New cancer centers and oncology outpatient clinics are being built in record numbers in response to demographic trends, advances in cancer treatment and an overall trend toward specialization of care. These modern settings are being built to provide calm and comfortable surroundings for more personalized and focused patient treatments in a welcoming place for everyone.

But for the patient, even in improved settings, what matters most is the discomfort of sitting for hours of therapy, often growing cold and weakened in the process. IoA Healthcare Furniture, with three decades of experience in specialized healthcare furniture, addressed these issues by creating a chair that supports and nurtures patients



undergoing chemotherapy, the Oncology Care Chair.

Fabio Delmestri, IoA vice president of design and marketing, explained, "Our interest in oncology care really started approximately five years ago, when we worked on the new Memorial Sloan-Kettering Rockefeller Outpatients Pavilion, an incredibly beautiful facility in Midtown Manhattan. Working with the project designer, Maureen Carley of Perkins and Eastman, we customized one of our standard patient room chairs and developed some new accessories. The project was very successful but we felt we needed to start a more concerted R&D effort that would eventually lead to a more focused and specialized product."

The Delmestris spoke with everyone involved in cancer care centers, from physicians and nurses to architects and patient specialists, but the most valuable research came from observing patients themselves. In particular, a close family friend who was diagnosed with cancer.

Three decades ago, when the Delmestri family's moving van pulled into their new neighborhood in the small town of Thomasville, N.C., Brian Fulton, a bright, sensitive teen with an easy smile and outstretched hand, was first on the doorstep to greet the new neighbors. That day started what was to become a lifelong friendship.



IoA's Oncology Chair offers comfort and flexibility to help patients undergoing chemotherapy.

Last year Brian, always very fit and healthy, shared some shocking news: the sudden diagnosis of a particularly aggressive form of Non-Hodgkin's lymphoma that required an immediate bone marrow transplant. Following the first ultimately unsuccessful attempt, Brian and his family opted to try a second transplant.

On a visit to Brian during a chemotherapy session, Delmestri was struck by the residential, overstuffed recliner Brian sat in, hooked to various monitors and several IVs.

"I always knew what an important role the chair plays in chemotherapy, and spending that time with Brian confirmed it," he said. "We discussed some basic needs and issues that he and other patients like him faced. Brian showed me the pressure bruise he had in his leg from keeping his legs crossed for just about 10 minutes. I observed firsthand the frustration raised by something as simple as having his cell phone just out of reach when it rang." >>

Delmestri asked Brian if he wanted to be involved in the project, and Brian became excited about being able to contribute. Unfortunately he only



lived a few weeks after the second bone marrow transplant.

Patients undergoing chemotherapy are often cold, so IoA included heated contoured cushions on the Oncology

Care Chair that not only provides the necessary warmth, but also give more control to the patients.

Because the treatments can last up to six hours, the cradling shape of the back helps to make patients

of all body types feel more supported by providing proper, adjustable lumbar support. The chair also helps to reduce pressure points to decrease the incidence of sores and skin breakdown through the use of air cushion technology. Though commonly used for this purpose in beds and wheelchairs, IoA worked with The Roho Group Company to develop a seat cushion for the Oncology Care Chair that allows the patient to adjust the firmness of the cushion by a simple, manual pump.

The Oncology Care Chair features smooth and pliable surface materials that are pleasant to the touch, but also highly durable and resilient. The fresh colors and patterns keep

their appeal through constant use.

A profile tablet allows patients to surround themselves with personal and familiar objects, whether it is a cellphone, laptop, book or the cookies brought from home. A gas-assisted articulating arm effortlessly brings the right-sized tray up from the side and swings it to the front of the patient.

To support patients in weakened conditions, a motorized tilt support allows them to move easily from sitting to standing and to control a full range of reclining positions.

"Every design project we do benefits from previous ones, and will influence future ones," Delmestri concluded. **DEANNE BECKWITH**

Altoona Curtails Load

System Upgrade Reduces Utility Bills and Provides for Full-Load Testing.

Altoona Regional Health System in Altoona, Pa., wanted to reduce its energy bill, so after upgrading its emergency power system it agreed to participate in its utility's load curtailment program.

The utility can and does call on the 346-bed hospital during summer peak load demand to shed load from the utility grid. Altoona gets two hours' notice to reduce its demand by a certain kW amount and it meets that requirement by shedding its chillers from the utility source. Staff starts the generators and transfers the load seamlessly using its ASCO Closed Transition Transfer Switches.

"There's no break in power," said Jim De Stefano, director of construction and design services. "People don't even see it." The transfers are

'invisible' because closed transition transfer switches eliminate momentary power interruptions by connecting with one power source before breaking with another.

They also don't see transfers conducted during the hospital's monthly testing procedures. The maintenance staff operates the system during the day for a full eight hours and transfers the hospital's entire load to the on site engine-generators.

"We believe that maximizes engine life," explained De Stefano.

The emergency power system upgrade included refurbishing two engine-generators and installing two new ones. All four are rated at 900 kW capacity. Three satisfy the hospital's entire load, including chillers, and the fourth serves as back up.

The upgrade also included adding ASCO power transfer switches and generator paralleling control switchgear.

