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FINANCING THE FUTURE

LIFESTRUCTURES EXT BRINGS EXTENDED LIFE TO STRUCTURE



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PHOTOGRAPHS BY CRAIG DUGAN WITH HEDRICH BLESSING

Massive changes in healthcare are taking place as hospitals reinvent themselves to cater to the medical needs of aging baby boomers. One strategic tool that some hospitals are using is data-driven, evidence-based design. Evidence-based design looks at ways facility design can improve patient outcomes and operational performance.



Lakeland Regional Health System, a non-profit, community-owned healthcare system, has embraced evidence-based design and used it as a major focus in the design of a new 118-room inpatient replacement tower on its St. Joseph, Michigan, campus.

When Lakeland Regional Health System set out to add a new bed tower, it had two primary goals in mind:

- To create the “hospital of choice” for southwest Michigan residents, who have other healthcare options accessible within a two-hour drive; and
- To use evidence based-design to improve safety and clinical outcomes as well as customer and staff satisfaction.

In March of this year, the new 140,000 square-foot structure opened for business and has already gone a long way toward achieving both of these goals.

Envisioning Session

BSA LifeStructures, the architectural and engineering firm that shepherded the project through its early phases, led an “envisioning process” which involved an unprecedented 63

community stakeholders – business, civic, government leaders – in a series of three meetings to refine and translate design principles into structural elements and materials. They used room mock-ups with actual materials and kept participants abreast of functional aspects of the project. Those 63 people came into the process as representatives of the community and left it as spokespeople for the hospital.

Having identified 53 performance measures for the new facility, Lakeland will soon be able to compare the first year of performance with data it has already collected on current hospital operations.

Performance Metrics

One example of these performance measures is patient falls, 90 percent of which occur when patients get out of bed to go to the bathroom. “Currently, it’s 22 feet from the bed to the bathroom,” explained Mike Kastner, the system’s director of building services and construction management. In the new rooms, the distance is only seven feet, but Lakeland didn’t stop there. BSA LifeStructures healthcare planner Monte Hoover explains that they also “enlarged the bathroom door from the standard three feet to five feet, so the caregiver can easily go through with a patient, and we made the toilet the first thing you come to.”



To make the nursing units quieter, less congested and less distance for the nursing staff to travel, Lakeland chose a flexible floor model featuring identical pods of eight beds at each corner, which can operate as one unit or four. There are separate elevators for patients/staff, visitors and service deliveries. Nursing stations at each pod have acoustical ceiling tile and are connected by carpeted corridors.

The single-bed, acuity-adjusted patient rooms are 305 square-feet (an increase of 40 percent over current rooms) and feature operable windows overlooking natural settings, amenities such as card/flower shelves, patient-controlled temperature controls and a sleeper sofa in the “family zone.” Family members can also relax in retreat areas with fireplaces, lounges and kitchenettes. Families have their own elevator at the opposite end of each floor from the patient elevator, to improve privacy, infection control and to reduce congestion. A separate materials elevator in the core of the patient floors serves a centralized distribution system.

Having piloted a voice-activated nurse call system on one floor of the current hospital and seen patient satisfaction score dramatically improve, Lakeland has installed it throughout the new facility.

The Business Case for EBD

Was it hard to make the business case for spending more on things like acoustical tile? Kastner says, “No, not when you ask the right questions. What’s expensive?”

Turnover is expensive. If you make staff happier and have less turnover, that’s a savings. Maybe we paid \$60,000 to \$80,000 more to upgrade the ceiling tile in key areas like nursing stations. When you spread that out over a \$40 to \$50 million project, it doesn’t hurt so much. The money becomes less important if you get a true added value in things like staff and patient satisfaction. It’s about more than just the space.” Overall, he estimates, implementing evidence-based design probably cost 2 to 3 percent more than a traditional construction approach.

Incorporating this evidence-based design process allowed hospital administrators and users at Lakeland Regional Health System to understand and express their priorities and to provide a way to track the success of their decisions and the resulting designs. Since the opening of Lakeland’s new inpatient tower, before and after data has been collected, and soon we plan to share with you the true value of integrating evidence-based design – a positive impact on patients, caregivers and families alike.



LIFESTRUCTURES EXT BRINGS EXTENDED LIFE TO STRUCTURE

BSA LifeStructures has developed a new line of services called EXT, which focuses on maximizing building utilization. LifeStructures EXT provides specialized extended services, which allow facilities to function with increased effectiveness and decreased operational costs.

By providing a single point of contact to assist with facility issues, EXT aspires to provide affordable, value-added solutions to address ever-changing needs. EXT service lines include:

- Hospital Operations Planning
- Facility Documentation
- Commissioning Services
- Equipment and Technology Planning
- Compliance
- Systems Forensics
- Building Operations

From day-to-day concerns, to ongoing operational maintenance issues, to unexpected crisis situations, EXT can change the way facilities are maintained, organized and utilized. With our vast experience and depth of resources, we can deliver big while acting small – responding quickly, with flexibility and agility.

Stop by to visit us at Booth #402 to learn more about EXT at the upcoming Midwest Healthcare Engineering Conference in November .



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