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**Objective:**

Upon completion of the lecture, attendees should be better prepared to:

- Describe the components of a comprehensive burn center

**Abstract:**

**Introduction:** Healthcare facility design to improve patient experience, safety, and quality faces many challenges when caring for those with burn injuries, from increased temperature and infectious considerations to unique rooms that accommodate procedures and therapies specific to burn care. New burn center design is rare due to the relatively few burn centers in America undergoing renovation or development and the associated costs of construction. Our study shares the results of a multispecialty workgroup including architects, engineers, diverse health professionals, and burn survivor that designed and built a new comprehensive burn center and the patient experience survey results.

**Methods:** The healthcare system in collaboration with the state's largest academic health partner and the Department of Health performed a regional needs assessment and invited physicians credentialed at the parent facility to submit proposals for expansion. The physicians and Department of Health agreed upon the need for a burn center located in New Orleans. A user-led work group included a healthcare architectural firm, an experienced disaster architectural expert, nurses, physicians, therapists, engineers, infection control experts, and a burn survivor. The American Burn Association's (ABA) verification requirements were incorporated into the design along with a concept of a comprehensive center which would house outpatient and inpatient care components. The workgroup met every week for 1-2 hours for 9 months and completed design and construction in the Spring of 2018.

**Results:** A 27,000 ft<sup>2</sup> facility was dedicated for comprehensive burn care. Components of the burn center included: 20 ICU-capable, fully handicap-accessible, private inpatient rooms with walk-in showers/bathrooms, sleeper sofa, positive/negative ventilation averaging 290 ft<sup>2</sup>, original artwork from local artists in every patient room and hallways, abundant natural light from wall-sized windows, variable air ventilation system with skid mounted heat exchanger to maintain humidity and reduce odor while maintaining temperature up to 95 degrees F, a 705 ft<sup>2</sup> hydrotherapy room with general anesthesia capability, a 290 ft<sup>2</sup> balcony in inpatient unit with a view of the Mardi Gras parade route, a family

room/multipurpose room with kitchenette, a 4,060 ft<sup>2</sup> comprehensive acute rehabilitation gym with occupational, speech, and physical therapy services, wall-mounted flat screen televisions located for inpatients, hydrotherapy, and family rooms, outpatient multidisciplinary clinic adjacent to the inpatient unit and rehabilitation gym that can convert to inpatient rooms for disaster response, teleconference room, classroom room, office space for burn staff, and patient vitals monitors throughout the burn center and burn clinic. Sound dampening was facilitated through room/hall design. Infectious considerations were addressed in a multitude of ways including wall paint, counter/surface materials, and ventilation design. Our initial patient surveys responses were favorable. The results included 100% overall patient satisfaction reported from anonymous National Research Corporation health survey of discharged patients. The measure of patient willingness to recommend the burn center and satisfaction with quietness and cleanliness of environment also reported at 100%.

**Conclusions:** Comprehensive burn centers are uncommon jewels in hospitals with only 130 of over 5,900 hospitals featuring a dedicated area for burn care. Our results demonstrate that burn center design by a team of burn professionals can lead to an aesthetically pleasing physical environment valued by patients, families, and the healthcare team that provides complex clinical care.

**Disclosure:**

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