

Public Abstract

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Title:Evidence-based Design Utilized in Hospital Architecture and Changing the Design Process: A Hospital Case Study

Since evidence-based design (EBD) is a new paradigm in architectural design practice, little information has been found regarding how credible research is evaluated, interpreted, and implemented in healthcare design practice. This research investigated how EBD was integrated into hospital architectural design and how traditional design process was modified to incorporate credible research evidence through a case study at Grand River Hospital in the United States. Findings revealed that the investigation for EBD needs to focus on environment-behavior studies especially in the development of explanatory theory. As the implication of this research, a modified cyclical design process model for integrating EBD was proposed. This redefined design process model requires collaborations with all stakeholders by adding visioning sessions, multiple design charrettes, mock-ups, and the functional performance evaluation to help to implement research evidence and make design decisions to achieve the best possible outcomes. The findings of this study fill in the gap in the body of knowledge of EBD and lead to better design decisions and increased rigor of design practice.