OBJECTIVES
To assess the effectiveness of three different design innovations in a mental healthcare facility through a post-occupancy evaluation (POE).

Post-Occupancy Evaluation of a Mental Healthcare Facility Based on Staff Perceptions of Design Innovations


Key Concepts/Context
Post-occupancy evaluation (POE) is a research method for gathering information on the effectiveness of new architectural designs in healthcare environments. POE can help healthcare providers and designers gauge whether or not a given design is achieving its intended purpose. Since evidence-based designs are becoming more widely implemented in a variety of healthcare environments, POE could prove useful in many different departmental contexts. The authors note that the application of POE in research focusing on mental healthcare facilities is rare, signaling a need for exploration.

Methods
This study gathered POE data from staff members at a mental healthcare facility from 2015-2016. The facility itself underwent three major design innovations during 2013-2014, including new visual cues (known as wayfinding strategies) to aid cognitively impaired patients. Other innovations included additional staff communication centers (known as care stations) and a revamped color scheme throughout the facility. POE data were gathered from staff via 12 in-depth interviews and 86 anonymous surveys.

Findings
Analysis of the qualitative data gathered through surveys and interviews, as well as the quantitative data gathered in the anonymous staff surveys, showed that the wayfinding strategies were effective in achieving their intended purpose. The new wayfinding pictograms were seen as particularly effective. The openness and clear communication offered by the new care stations were viewed positively by participants, but in regards to staff safety, participants held a "we'll wait and see"
attitude. The adjusted color schemes of the facility seemed to help relieve patient stress and boost energy; however, no common ground was found as to whether or not the colors improved overall patient satisfaction.

**Limitations**

The authors note that this study derives its findings only from interviews and surveys; no systematic reviews of incident records or interviews with patients and their families were conducted. This study also took place within one specific facility and gauged the efficacy of three specific design concepts; these findings may not be applicable to all mental health facilities undergoing evidence-based renovation.

**Design Implications**

Designers can make it easier for patients to navigate the healthcare environment using color markings, open sight lines, and consistent pictographic indicators. Wall and ceiling colors within specific sections of mental healthcare facilities could correspond to the conditions of the patients themselves – vibrant, saturated colors to help energize one population, and warm, soothing colors to calm another. Open-air staff desks with passive safety features could help improve patient-staff communications while keeping safe boundaries in place.