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## Assessment Tool for Users' Experience in Healthcare Settings

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## Assessment Tool for Users' Experience in Healthcare Settings

### Abstract

Issue: In creating notable experiences for patients in healthcare settings, design components are critical in offering psychological support surrounding patients' expectations with respect to the level of clinical care (Dilani, 2008; Knudson, 2017). A growing body of research maintains that healthcare design strategies influence patients' health outcomes and wellness (Devlin & Arneill, 2003; Laursen, et al, 2014). While evidence-based design has been studied through post-occupancy evaluation of overall facility design of clinics and other spaces such as inpatient rooms (Quan et al, 2017), little research has focused on evaluating users' physical and emotional well-being, and social interaction that inform wellness-design features. Therefore, the purpose of this study is three-fold: 1) to generate wellness-design criteria to assess the design of existing facilities based on users' experience; 2) to develop design guidelines (checklist) to assist in design decision-making; 3) to propose a method and protocol for user-centered wellness design evaluation tool for future studies.

### Disciplines

Cognition and Perception | Environmental Studies | Interior Design | Visual Studies

### Comments

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**Abstract:**

**Issue:** In creating notable experiences for patients in healthcare settings, design components are critical in offering psychological support surrounding patients' expectations with respect to the level of clinical care (Dilani, 2008; Knudson, 2017). A growing body of research maintains that healthcare design strategies influence patients' health outcomes and wellness (Devlin & Arneill, 2003; Laursen, et al, 2014). While evidence-based design has been studied through post-occupancy evaluation of overall facility design of clinics and other spaces such as inpatient rooms (Quant et al, 2017), little research has focused on evaluating users' physical and emotional well-being, and social interaction that inform wellness-design features. Therefore, the purpose of this study is three-fold: 1) to generate wellness-design criteria to assess the design of existing facilities based on users' experience; 2) to develop design guidelines (checklist) to assist in design decision-making; 3) to propose a method and protocol for user-centered wellness design evaluation tool for future studies.

**Process and Method:** Qualitative and quantitative research methods were used to create a valid set of wellness design criteria. First, content analysis was conducted identifying wellness-design goals and critical components of existing design evaluation standards and guidelines (Table 1). Secondly, an online survey and statistical analysis were used for examining how users might perceive 20 wellness-design components based on their experience when visiting facilities. A total of 299 human subjects who had visited a healthcare facility at least one time in the United States during the past 12 months participated in the national survey in April, 2017. Data were analyzed to determine how wellness-design goals are met, and what critical design components are important, and how they effected experience of the physical, emotional, and social well-being of participants.

**Results:** An excel-based interactive wellness-design evaluation tool (Figure 1) was created based on research results. From content analysis, descriptive narratives and graphic visuals provided a detailed understanding of critical design components that are evidence-based. A set of graphic diagram and illustrations of the 20 wellness design components were cross-referenced (Figure 2). The mean values of each design component, and their impact on participant's physical, emotional, and social well-being from the survey results (Figure 3) were incorporated to develop wellness-design criteria for setting evaluation standards to be used in evidence-based design projects. Each design component was addressed in terms of the three wellness aspects of the healthcare facility during their visit. Itemized scores for each design component and the final score of the total itemized scores from individuals' evaluation results were compared to the mean values of the survey results.

**Importance of the Topic:** This study introduces evidence-based design criteria, method, and tool to support the concept of users' health and well-being and ultimately wellness experience of patients and family during visits to healthcare facilities. As an evidence-based model of practice, the tool could facilitate communication among the collaborative team of healthcare designers and stakeholders involved. Although survey participants had limited exposure to overall facility, the study provides new insights to suggest research possibilities and applications of the tool with respect to how the general population might perceive the wellness-design components in healthcare environments, and what design solutions support users' experience of care.

Link: <https://www.idec.org/files/2019%20IDEC%20Conference%20Proceeding.pdf> pp.111-112