EVIDENCE-BASED DESIGN

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Introduction

I am writing this letter to clarify why the proposed facility should adopt evidence-based design. It is undisputable that the competition in healthcare industry is growing as new facilities enters the industry at high rate. In order to hold the competitive edge, it is important to adopt some of the most competitive strategies. One of these strategies is the evidence-based design. The letter will give brief history of hospital design process, description of evidence-based design, and reasons why the evidence-based design should be adopted.

History

The way in which the hospitals are designed and built has evolve over time. Traditionally, most of the healthcare organizations are designed based on opinion, preference or personal values. However, since the end of 19th century, laboratory and field research on the relationship between designs and organizational goals intensified. It was discovered that the choice of design can influence the healthcare outcomes. It was found that some designs are measurably safer, more efficient and of higher quality. Consequently, most hospitals are adopting a new approach called evidence-based design.

Description of evidence-based design

Evidence-based design is the process of using credible research to make decision about the built environment in order to achieve the best possible outcomes. EBD links building design decisions with key performance outcomes that have been systematically evaluated. If environment A, for example, has been shown to result in an increased patient satisfaction, then a new facility should be designed based on environment A design. Similarly, an evidence-based design facility should possess qualities of an architect associated with fewer nosocomial infections or fewer falls (Marcus & Sachs, 2014). There is no single model for achieving evidence-based design. However, most of evidence-based design shares some features. First, they depend on findings that has been collected thoroughly throughout the design process to determine how design decisions are likely to influence performance outcomes and project-specific goals. They also use a variety of information and information collection approaches to pick up a comprehension of how design decisions are probably going to influence execution results and venture particular objectives. The most common sources of data is benchmarking. This include talking with experts, clients, users, and observing how your own designs have been used. In addition, the patient satisfaction surveys such as HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) give reliable information concerning patient satisfaction towards the hospital design (Marcus & Sachs, 2014). Each of these method should, however, be evaluated in terms of the reliability and credibility of the information it generates. Another feature that is common in evidence-based design is that there is usually a multidisciplinary design team that can examine a project from different perspective. In addition, it is possible to hypothesize or predict early about the possible effects of key design choices on consequences.

The importance of evidence-based design is supported by vast amount of literature. Most studies have revealed that there is a close relationship between the physical, environmental design of healthcare setting and patient, staff, and organizational outcomes in healthcare. Citing the studies conducted by Ulrich, Zimring, and colleagues, Harris, D. D. (2008) reveals that there is clear evidence in many areas demonstrating how environment affects outcomes in healthcare settings. The findings from the study reveal that the design of hospital units alone may contribute to higher-than-recommended noise levels, which in turn affect sleep, communication, and healing. It has also been demonstrated that hospital design characterized by multi-bed patient rooms, poor air quality and lack of hand-washing facilities contribute to higher rates of hospital-acquired infections. One area that has not been studied extensively concerns the impact of the environment on staff performance and effectiveness.

Advantages of evidence-based design

There are a number of reason why I am proposing the use of evidence-based design in the new facility. First, evidence-based design increases healing process. For example, if it is established that an environment with music system increase healing, then the design will include music system in its architectural consideration. The second reason why evidence-based design is effective is that it increases patient satisfaction. Through evidence-based design, an organization can choose a design that has been found to foster patient satisfaction. The third reason why evidence-based design effective is that it reduces hospital-acquired infections. For example, if it is found that single patient rooms, good air quality and presence of hand-washing facilities reduces hospital-acquired infections, then the healthcare facility will be designed in accordance with these specification. This will reduces hospital-acquired infections. The fourth reason why evidence-based design should be adopted is that it is possible to predict the outcomes. This means that if there is any deviation from the outcome, it would be easier to diagnose the cause of the deviation.

References

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Marcus, C. C., & Sachs, N. A. (2014). *Therapeutic landscapes: An evidence-based approach to designing healing gardens and restorative outdoor spaces*. Hoboken, New Jersey : John Wiley & Sons

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