



## KEY POINT SUMMARY

### OBJECTIVES

The purpose of this study was to see if patients in a home-like environment like a group home experienced less cognitive decline than patients who lived in a long-term care facility.

## Comparison of a sample of green hospitals with non-green hospitals with respect to operating expenses and patient revenue

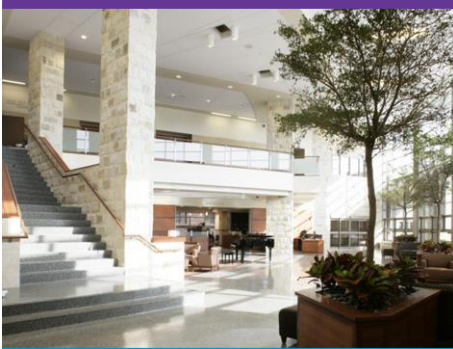
Sadatsafavai, H., Walewski, J., & Taborn, M. 2014 | *Journal of Green Building* Volume 9, Issue 2, Pages 163-188

### Key Concepts/Context

Leadership in Energy and Environmental Design (LEED) has been an influential program behind the design, construction, and operation of green healthcare facilities across the U.S. Generally, green hospitals are designed to provide long-term ecological and financial benefits by promoting more efficient use of water, energy, and materials. Several previous studies concerning green building practices have demonstrated the positive aspects of LEED certification. However, no previous research has directly compared the financial performance of LEED-certified hospitals with non-LEED hospitals of similar size and location.

### Methods

The comparison between LEED and non-LEED hospitals was based on annual operation of plant costs (\$ per square foot), annual inpatient revenue (\$ per bed), and the annual plant cost ratio (percentage of total operating costs going towards running the plant). Additionally, while analyzing the best- and worst-performing LEED facilities, the authors assessed the profitability index (total inpatient revenues plus total outpatient revenues divided by total operating expenses). In order to produce more statistically significant data, three levels of comparative analysis were conducted: 1) LEED facilities against the national average regardless of size, type, and location, 2) LEED facilities against national and state averages of similar facilities, and 3) LEED facilities against facilities of the same size and type at state and national levels. Ultimately, 14 LEED facilities were compared to these three-level averages of non-LEED facilities.



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## Findings

Although the 14 LEED hospitals surveyed earned higher inpatient revenue than all other non-LEED facility averages, LEED hospitals faced higher operating expenses. Only three of the 14 sampled LEED hospitals performed better than average non-LEED hospitals on all financial indicators involved in this study. It is evident that financial performance is not better in hospitals with higher levels of LEED certification.

## Limitations

The authors cite several limitations within the study. A relatively small sample size was used, and only one year of data was involved; multiple years worth of data should be implemented to track the performance of LEED facilities.

## Design Implications

Green building options may have positive impacts ecologically and financially in the long-run, but these options should be carefully considered due to their expensive nature and slow rate of return.

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