



KEY POINT SUMMARY

OBJECTIVES

To investigate the relationship between physical attractiveness, waiting times and perceived quality of care.

The Ecology of the Patient Visit: Physical Attractiveness, Waiting Times and Perceived Quality of Care

Becker, F., Douglass, S. 2008 | Journal of Ambulatory Care Management. Volume 31, Issue 2, Pages 128-141

Key Concepts/Context

Waiting times can be a challenge in outpatient facilities. This may impact the satisfaction of patients as well as the efficiency of staff. While the actual waiting time is often a result of process, the quality of the wait, and the overall waiting experience, can be effected by the environment. This study examined the relationship between the attractiveness of the physical environment of healthcare facilities and patient perceptions of quality, service, and waiting time through systematic observations and patient satisfaction surveys at 7 outpatient practices at Weill Cornell Medical Center.

Methods

6 clinical outpatient practices were identified within the Weill Cornell Medical Center/ New York Presbyterian Hospital medical center that varied significantly in physical attractiveness. 3 types of medical practices were examined: gynecology dermatology and gastroenterology. The 3 less physically attractive practices were selected based on existing plans to move to a renovated space within the same healthcare system. The use of separate locations within the same system was an attempt to hold differences in staff quality, patient populations and organizational culture constant to the extent possible.

The physical attractiveness of the 6 facilities were ranked by 6 graduate students in non-design related majors. Students were shown 4 photos of each of the 6 locations showing the waiting room, examination room and hallways of all 6 locations, and asked to rank the images on a scale of 1 to 6, 1 being least attractive, and 6 being most attractive. Results from the students were combined to create an environmental attractiveness score for each location. Rankings ranged from 9 to 34, with high inter-rater reliability.



DESIGN IMPLICATIONS

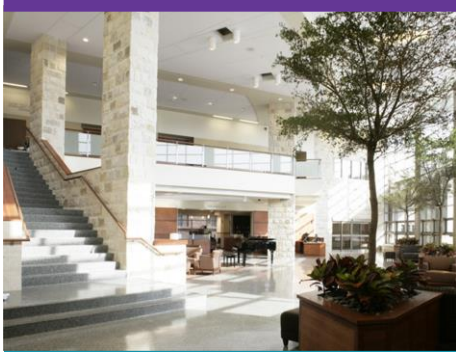
The attractiveness of the environment can have a ripple effect on patient satisfaction and improve the waiting experience.

More thought needs to be put into the design of exam rooms.

A multimethod data collection method was implemented which included systematic observations and patient surveys. Observations took place over a 13 week period during which 787 patients were observed across all practices in more than 370 hours of data collection. Observations were conducted by 2 research assistants at a time Monday through Friday, with synchronized watches and data collection sheets. Additionally, every patient on completing his or her visit was asked by the staff about their willingness to fill out a survey, and if yes, given a survey which contained questions about the waiting area, examination room, interaction with staff and overall perception of quality of care. Patients were given the choice of filling out the survey on site (by dropping into a drop box) or mailing it back in after returning home using a self-addressed envelop. A total of 205 surveys were collected from the different practices. The low number of surveys was attributed in part to the fact that the staff often forgot to offer the surveys to the patients. 4 questions of the survey related to quality of care were combined and averaged to create a quality of care index. 4 questions related to staff response were combined to create the staff-interaction index. Data was analyzed in terms of the percentage of respondents who replied to survey questions with an “excellent” response which has been shown to be linked to loyalty. Additionally, patients were asked about their perception of how long they had to wait in the waiting area.

Findings

1. There was a significant correlation between the physical attractiveness index (as rated by the grad students) and the patients’ response to pleasantness of the physical environment
2. Patients spent $\frac{3}{4}$ of their time waiting, with $\frac{1}{3}$ spent alone in the examination room
3. Patients tended to overestimate shorter waiting times and underestimate the longer waiting times (with the exception of gastroenterology)
4. Patients who responded they had waited less than 5 mins has higher perceptions of quality of care, and the environment reducing their anxiety
5. Patients perception of waiting time in the exam room before the doctor entered were more strongly correlated with their overall perceptions than their wait time in the waiting area
6. Patient perceptions of quality of care, anxiety, feeling cared for and likelihood of recommending the practice were twice as high in the most attractive physical settings compared to the least attractive physical settings.
7. There were significant correlations between the overall patient-quality of care index and physical attractiveness, and relief of anxiety and attractiveness.
8. There was a significant relationship between the environmental attractiveness and patients’ positive impression of interactions with staff.



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Authors argue that physical attractiveness may communicate organizational values of “caring” and create a more positive experience for the patients. Positive impression of staff interaction supports previous research on how we have more positive impressions of people in more attractive environments. Finally, perceived waiting time is more important than actual waiting time in the formation of overall quality and satisfaction impressions, which given the link to physical attractiveness, makes the design of the physical environment a critical concern.

Limitations

The observed data in this study was not matched with the survey data, by patient. Thus while overall conclusions about the population groups can be made, a level of detail that matches the observed data from a specific patient, to the survey data from the same patient is missing.

Conclusions about anxiety need to be considered carefully since the question “the office environment helped ease my anxieties about my visit” implies a correlation between the environment and anxiety in the question itself which could create bias.

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