



KEY POINT SUMMARY

OBJECTIVES

The aim of this review was to identify instruments measuring the quality of the physical healthcare environment and describe their psychometric properties.

A systematic review of the psychometric properties of instruments for assessing the quality of the physical environment in healthcare

Elf, M., Nordin, S., Wijk, H. & Mckee, K. J. 2017 | *Journal of Advanced Nursing*.
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Key Concepts/Context

This review of published instruments was conducted to identify valid and usable tools that can evaluate the design of the healthcare environment.

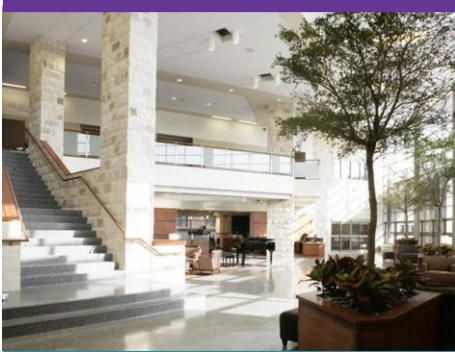
Methods

A systematic search of literature published between 1990 and 2016 was performed in two phases. First, a general search of select databases was conducted and then a second search was performed using the name of instruments and their developers identified in the first search. A Boolean strategy using various design and tool terminology was used. To be included papers had to meet the following criteria:

- Published in English
- Address the design of healthcare environments OR be a leading environmental certification instrument
- Focus on healthcare-related public dwellings
- Address more than one aspect of the healthcare environment

Findings

Twenty-three instruments were identified. Nine were from the UK, eight were from the US, three were from Australia, and the final three were from Europe. Seven of the instruments were developed to address dementia care settings and only two specifically addressed the acute care physical healthcare environment. Several instruments had broad applications. The most frequently used instruments were the Multiphasic Environmental Assessment Procedure (MEAP), Professional



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Environmental Assessment Protocol (PEAP), and the Therapeutic Environment Screening Survey for Nursing Homes (TESS-NH). Instruments varied considerably in terms of size, scope, range of dimensions, and the aspects of the environment assessed. The instruments addressed one of three main categories: evaluating an existing building design, planning new healthcare environments, or providing a quantitative evaluation of buildings. Three of the instruments assessed the physical environment from a user-centered perspective whereas two specifically addressed technical aspects of buildings.

Limitations

The majority of instruments identified were from the 1990s and may be outdated. Many of the instruments had only been used in specific context for which they were developed. In addition, while many of the instruments had been systematically and rigorously developed, all identified studies had low levels of validity and reliability assessments. Finally, the instruments were varied regarding the level of complexity to administer.

Design Implications

Valid and reliable instruments are essential to support the development of evidence based design. Further work should be dedicated to ensuring research tools are valid, reliable, and relevant to the challenges of modern healthcare environments.

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