The Seniors’ Outdoor Survey (SOS Tool): A Proposed Weighting and Scoring Framework to Assess Outdoor Environments in Residential Care Settings

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Key Concepts/Context

As the numbers of elderly patients seeking professional care increase demands on many different healthcare facilities, healthcare professionals continue to pursue advances in both pharmacological and non-pharmacological tools to help improve patient recovery and overall quality of life. Access to outdoor spaces, especially within medical care contexts, has been shown to promote considerable improvements in patient recovery and overall experience. In the case of elderly patient populations who may be living or seeking extended treatment within healthcare environments, consideration of patient preferences and intended uses of such outdoor spaces is of high importance. A standardized survey named the Seniors’ Outdoor Survey (SOS) was previously developed to aid designers in making informed decisions on how to construct outdoor areas for patient care. However, this survey did not address specific aspects of elderly patient care, namely, preferences for patients living with dementia or other age-sensitive conditions.

Methods

Three primary considerations were made in formulating this updated version of the SOS: resident preferences, behavioral outcomes, and expert opinions. Resident preferences were based on a multiregional survey asking about preferred outdoor features from over 1,100 residents living in 68 different residential homes sited in three different climate regions. Behavioral outcomes were derived from levels of walking and outdoor usage noted within the same population of aforementioned residents. Expert opinions were gathered through rated values placed on environmental features. The authors developed a numerical scale for weighing the
overall level of support offered by different environmental features and design decisions.

**Findings**

The SOS tool features 60 items subdivided into five domains. The importance of each item in these domains, being weighted based on the data collected from patient and expert perspectives as well as patient behaviors, ultimately featured minimal differences between mean weight of importance. This suggests that several items in each category may or may not be “make-or-break” features for many patient populations. High value was placed on the item “indoor-outdoor connection,” while lower importance was found in the item “comfort and safety”.

**Limitations**

The authors note that their proposed system for weighing the values of each item may not be universally applicable to all healthcare settings employing the SOS. Alternative weighing methods should be explored to further integrate evidence-based design into the SOS.

**Design Implications**

By incorporating patient perspectives, expert opinions, and observations of patient behaviors, healthcare workers and designers may be able to better implement the design items proposed in the SOS through a personalized valuation process. While outdoor areas will vary widely depending on their facility, general connectivity between indoor and outdoor spaces is greatly valued by patients and staff alike.