OBJECTIVES
The purpose of this study is to develop perceived hospital environment quality indicators for rating hospital settings, and to use those scales to compare hospitals selected to differ in their spatial–physical humanization (design features that support users’ needs and well-being).

DESIGN IMPLICATIONS
The more the degree of architectural humanization, the better the perceived quality of relational, organizational, and functional dimensions. A good design would facilitate the functioning of the whole healthcare system and, consequently, increase both users’ well-being and satisfaction and the quality of service provision.

Perceived Hospital Environment Quality Indicators: A Study of Orthopaedic Units

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Key Concepts/Context
The field of healthcare design has increasingly recognized the need for building environments that are more “user-centered,” but spatial–physical features have not typically been included in assessment surveys on patient satisfaction.

Methods
Orthopedic units in three different hospitals in Rome, Italy were evaluated by two architects based on 120 different design features that support users’ needs and well-being. Simultaneously, patients, visitors, and staff completed questionnaires related to a subset of physical and social environmental features.

Findings
Designers assigned higher ratings to hospitals that were identified as more “humanized” (design features that support users’ needs and well-being), followed by patients and visitors, whose ratings were similar; staff assigned an overall lower quality rating. A total of 12 Perceived Hospital Environment Quality Indicators (PHEQIs) scales emerged from factor and reliability analyses of patient, visitor, and staff responses:

1. External hospital spaces:
   - Upkeep & Care (good condition of paths, sidewalks, and entrances)
   - Orientation (finding care units and services, and signposting)
   - Building aesthetics (beauty, colors, and shapes)
   - Green spaces (trees and spaces to relax and socialize)
SYNOPSIS

2. Hospital care unit:
   - Spatial-physical comfort (wall and floor color schemes and spatial layout)
   - Orientation (signposting and recognizing unit’s entrance and information points)
   - Quietness (presence of quiet and lack of annoying noises)

3. Inpatient/(outpatient) waiting area:
   - Spatial-physical comfort (good condition/quality of furnishings and good upkeep and pleasant color schemes of walls, floors, and ceilings)
   - Views & lighting (large windows, air exchange, overlooking green space, adequacy of lighting, spaciousness of waiting area)

4. Social functional features:
   - Care for social and organizational relationship (warm/welcoming staff, adequacy of visits/information, and collaboration among staff)
   - Privacy (non-intrusiveness, ability to create personal space, talking with delicate issues with staff)
   - Additional services (information accessibility near unit, non-isolation, relationships, and sociability)

Limitations

In order to increase the generalizability of this study, there is a need for replication, larger participant sample sizes, and comparisons with other hospital units.