

## Design and content validity verification of an instrument to evaluate access to hospital infrastructure in Colombia

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**Abstract.** The present study determined the content validity of an instrument to assess Colombian health institutions physical access. The questionnaire was designed by the authors of the study, based on the Colombian Technical Standard of Accessibility to the Physical Environment 6047 framework. The content validity was carried out by six experts. To the score the content validity, the researchers designed a qualification template, and calculated a content validity index dividing the relevance and pertinence score of each item/question by the number of experts who evaluated the question. Based on methodological recommendations from the literature, items with content validity index  $\leq 0.78$  were eliminated from the questionnaire or modified in their wording in accordance with the recommendations of the expert reviewers. The content validity index of the scale was found to be excellent (0.95). In total, 2 questions were eliminated due to their low relevance index ( $\leq 0.78$ ). The final questionnaire has 69 questions. The importance of determining the validity of the scale in the present study, lies in the fact that a firm scientific basis must be constructed to verify whether such an instrument accurately measures reality.

### 1. Introduction

This study defines accessibility as a feature or condition that enables the use and enjoyment of the built environment. In Colombia, quality health care is considered to involve providing both individual and collective services in an accessible and equitable manner. To this end, the general social security system's mandatory health care quality assurance system establishes the conditions that must be fulfilled by the nation's health care centers. These conditions vary depending on the degree of complexity and technological sophistication of each specific institution, with three degrees of complexity specified – the third being the most exigent. The modern concept of infrastructure has also evolved, and presently incorporates an analysis of human behavior as a facet of the experience of spaces; in which places tend to result in more pleasant and attractive experiences [1-3].

The Colombian health care system currently evaluates hospitals and medical establishments for their compliance with the criteria of published quality standards, however little verification presently exists with respect to accessibility. Consequently, a need exists to design such an instrument based on the building code requirements established for the public-use structures in question. In order to help ensure



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