

# mHealth apps design using quality function deployment

[Süleyman Barutçu](#) ▼

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## Abstract

### Purpose

The purpose of this paper is threefold: first, to draw health managers', clinicians', entrepreneurs' and mobile apps designers' attention toward new mobile health applications (mHealth apps); second, to define mHealth apps design characteristics intended for doctors; and third, to highlight how mHealth apps can be designed using quality function deployment/house of quality (QFD/HOQ) techniques from doctors' perspectives.

### Design/methodology/approach

Data were collected through a survey and in-depth interviews with doctors to understand their needs and attitudes toward mHealth apps. Analytic hierarchy process, QFD and HOQ methods were used to analyze data.

### Findings

Doctors agreed that mHealth apps provide them with the tools to improve their service and to become more efficient. Once the 12 doctors' wants were collected, they were prioritized according to their significance and used for mHealth apps development. Eight technical characteristics that cater to doctors' expectations were sorted. The authors suggest that mHealth app designers need to provide design requirements recommended by health personnel for a higher satisfaction level.

### Originality/value

Healthcare managers are focusing on increasing their efficiency, patient satisfaction and care quality, and decreasing costs. For these purposes, mHealth revolution and mHealth apps have high potential for improving doctor effectiveness and healthcare quality. This study is among the first to: define Turkish doctors' wants from mHealth apps; elaborate the app's technical characteristics; and increase design quality, which is implied in improving app design.

## Keywords

House of quality

Quality function deployment

MHealth applications

MHealth revolution

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