

# Telecare App for elderly people living alone in Latin America

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## INTRODUCTION

It is increasingly common for older adults to want to grow old in their homes and carry out their daily activities independently. The use of assistive technology favors aging at home with better security, providing, in some cases, independence for the elderly and tranquility and confidence for the family member and caregiver (Breysse et al., 2021).

**Telecare Apps have focused on the remote control and care of the elderly or the person with a disability who lives alone at home, presenting very specific functions such as taking medication or requesting help through an emergency button. , but very few Apps cover a set of functions necessary for remote care, they are little known by older adults and they are not usually free (Macis et al., 2019).**

## OBJECTIVE

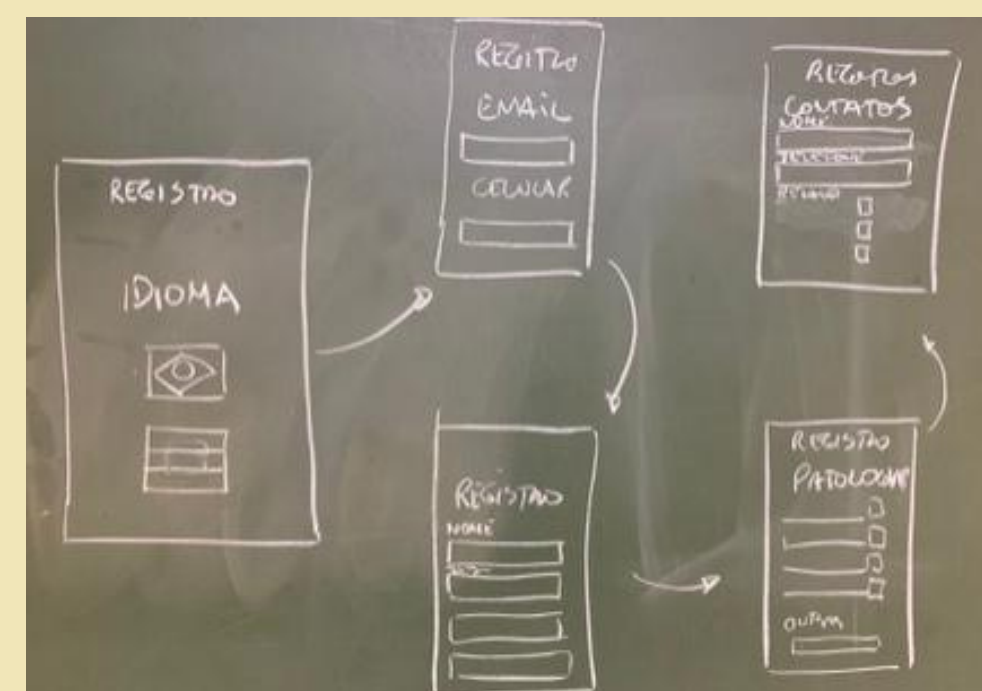
The objective of this study is to present the design and development of a Telecare App taking into account the needs of the elderly and the family/caregiver.

## MATERIALS/ METHODS

During user-centered design, the researchers used a combination of qualitative methods and tools, such as focus groups and brainstorming, to understand the needs of users. A total of 24 Brazilian older adults with a mean age of 65.2 years participated.

**1. Design and Development Stage:** It was carried out with two focus groups of 6 Brazilian older adults to discuss the features and design of the App. The discussions were led by the researchers, presenting a general description of the App's functions and where the participants contributed ideas from the images, the colors and the types of messages associated with each function.

**2. Functionality test of the App:** Once the prototype was developed, two focus groups of 6 Brazilian older adults were organized and they were asked to download the App on their respective smartphones and that 3 of the participants used the App in user mode and the other 3 participants in user mode. of caretaker, with the aim of providing feedback on technical errors and difficulties encountered regarding the functionality of the system

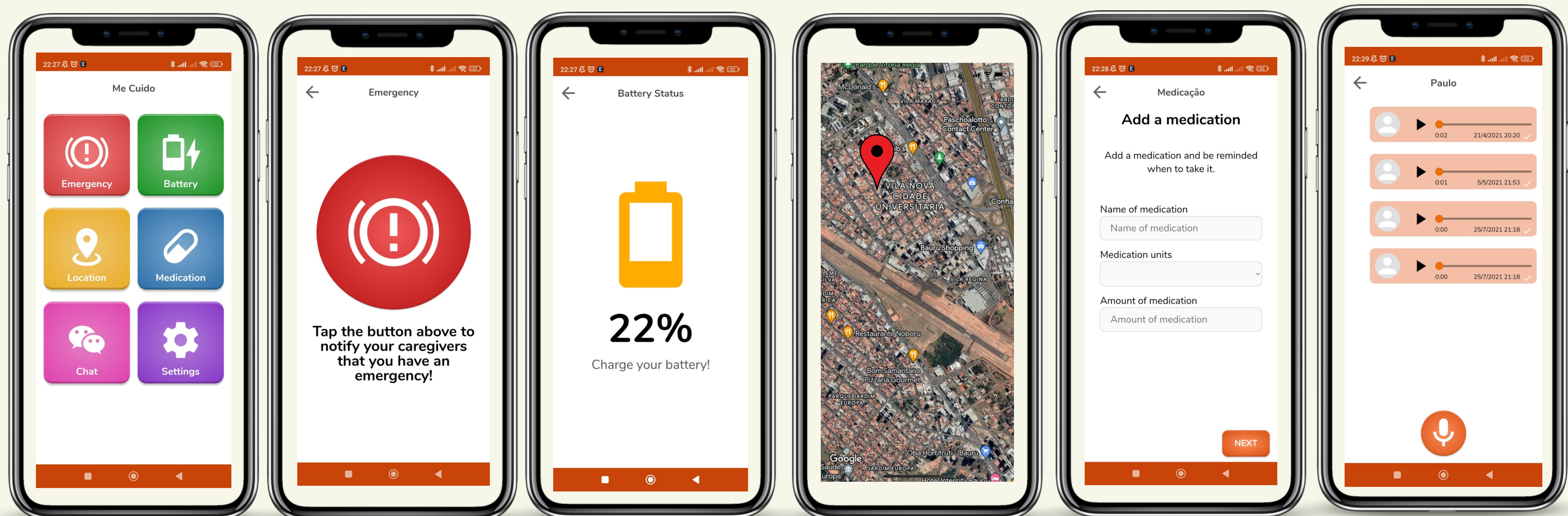


## RESULTS

MeCuido is a free App for mobile phones with Android operating system that has different functions to offer remote care. The App has a single system, however, it has two different interfaces, the user's area and the family/caregiver's area.

If the user area is selected, the functions of the App are designed for the use of: **emergency button, medication notification, location, mobile phone battery control and chat with the reference family member.** On the other hand, the relative/caregiver area is focused on monitoring through informative notices about the actions of their elderly relatives regarding their needs.

**The functional evaluation of the App was carried out with 12 older adults divided into two focus groups. Older adults commented difficulties in understanding the function of the pager.** The researchers took feedback from the older adults into account and updated the locator feature with the directions the older adults had given.



## CONCLUSIONS

After the experience of this study, it is recommended for the design and development of telecare Apps for older adults to take into account:

- Carry out a previous study on the perception of use that older adults have with telecare Apps and what functions are the more accepted;
- Take into account the opinions of future users in the design of the information architecture of the App interface;
- Have the participation of older adults during the development of the App to determine the most appropriate colors, images and fonts; •Perform different usability tests with future users from different countries.



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