# WorkUp: A Mobile Application to Support Health Guidelines

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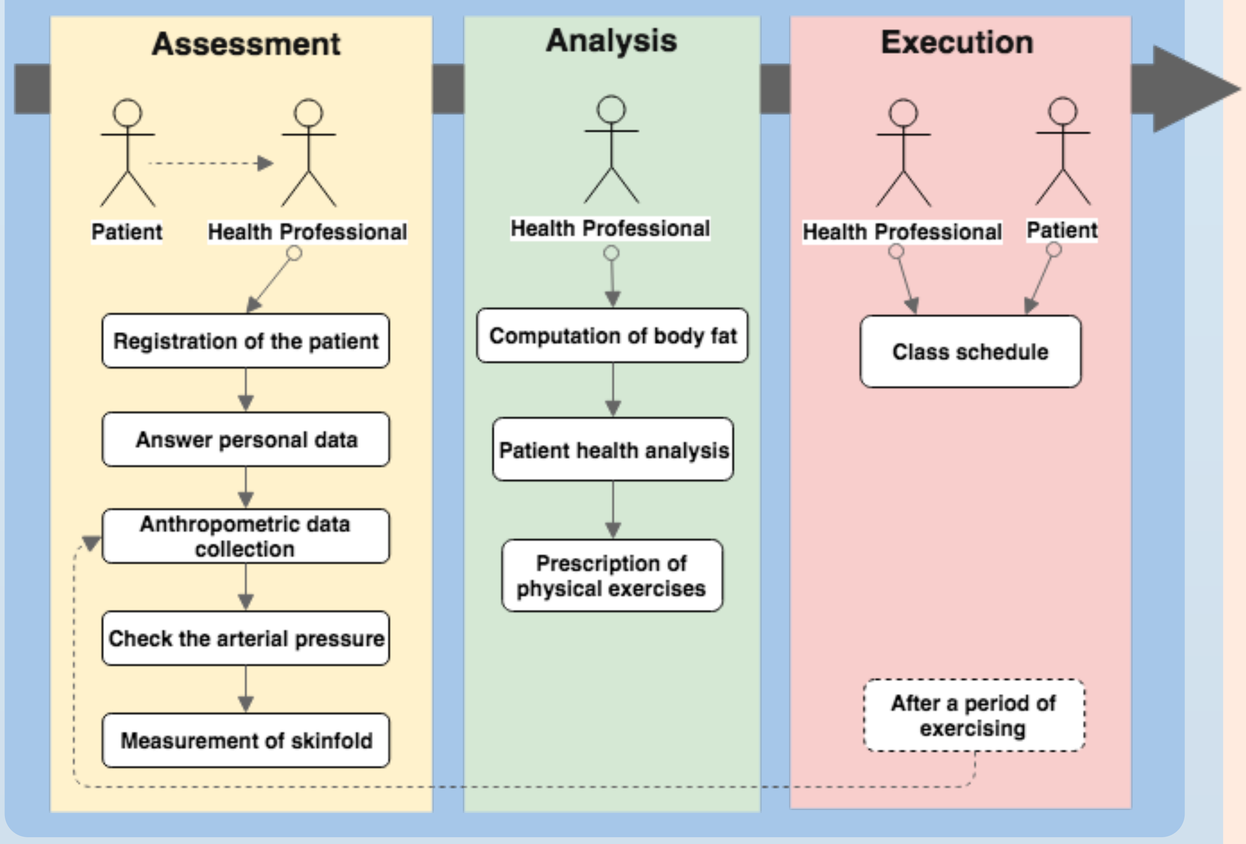
## Background

- The percentage of overweight in the global population reached approximately 60%;
- Several countries have developed policies and guidelines for supporting health promotion;
- Mobile applications is one way to promote the practice of physical activities;
- However, fewer mobile apps evaluate patients' anthropometric data and to prescribe physical exercises.

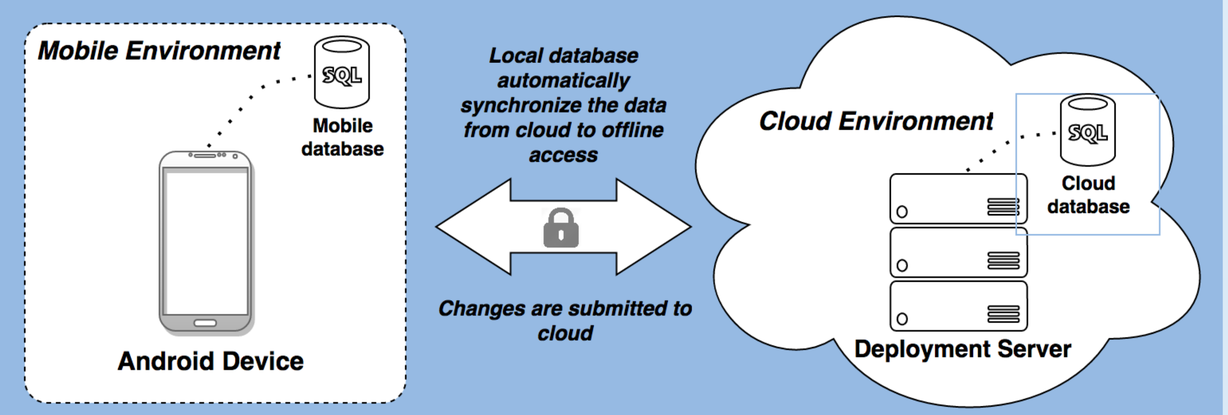
## Features

- Collection and monitoring of anthropometric data;
- Multiple equations for computing body fat using skinfold;
- Support of prescription of physical exercises;
- Class scheduling and interaction between health professional and patient.

## Model of health policy




## Cloud data synchronization




## Results

### Assessments

### Training

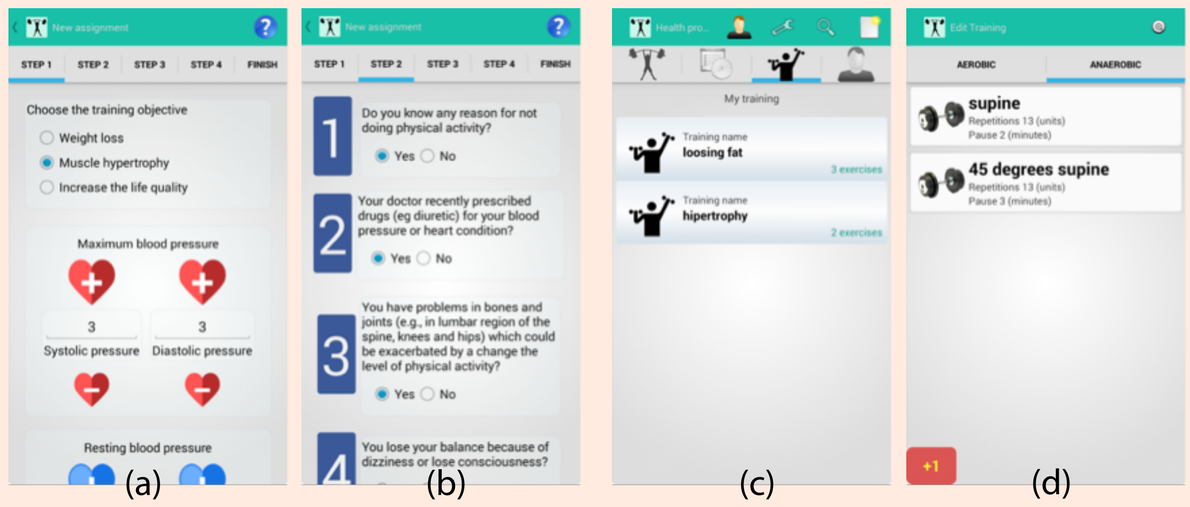



Figure 1: Evaluation and training management: (a) Objectives and blood pressure; (b) QPAF Questionnaire; (c) Training; (d) Edit training

### Log of Exercises

### Scheduling a class


Figure 2: Evaluation and training management: (a) Objectives and blood pressure; (b) QPAF Questionnaire; (c) Training; (d) Edit training

## Evaluation

Health professionals and patients have tested the WorkUp and their overall opinion are summarized in 5 categories:

**Patient data and activities tracking**: Participants emphasized that the control of physical activities is important to establishing goals and analyze if results have achieved them. "*I need to know to track if the patient is losing weight and if the goals are being achieved*." (Health Professional)

**Ability to monitor more patients:** Health professionals were receptive when asked about the ability of WorkUp to manage multiple patients. *"I see it as an easy way to record my patients data and control more efficiently my schedule*." (Health Professional).

**Accessbility of information:** Both health professionals and patients pointed out that they feel confused to navigate on WorkUp interface. *"In the first moment, I did not find some functionalities. But, once it is explained it was easy to access it*." (Patient).

**Information distortion**: The health professionals point out that patients can distort the feedback of exercises. "*It is not guarantee that the data provided by a patient is really reliable."* (Health Professional).

**Interface and applications restrictions**: No serious issues were reported by users. However, health professionals suggested a more restrictive application would be interesting for results achievement. "There are many features, but it would be interesting restrict the app functionalities exclusively to the important features." (Health Professional)

## Conclusion and Outlook

- WorkUp can be a base model for supporting government health programs to promote a healthier life in population.

**Ongoing research:**

- Refine app functionalities to meet users' requirements only;
- Support sensors, as smartwatch and smartbands;
- Conduct a pilot project in a health unit using WorkUp to evaluate its adherence and effectiveness as support in reducing obesity.

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### Sources

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