Integrated System to Automatize Information Collecting for the Primary Health Care

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Introduction

- Collecting data from Family Health Care: problem of integrity; availability and reliability of results

- Public health care in Brazil:
  - 95% our cities (5,284);
  - 53 % of country’s population;
  - Primary health care units (43,000);
  - Community-based Health Workers (CBHW).

- Each Unit: one physician, two nurse, two nurse technicians and from 4 to 6 CBHW;

- Manual Process is slow and problematic;
Objectives

- Develop a system to automatize data collection and to monitor Primary Health Care.
Methodology

- Choose device:
  - 248,000 Community Health Workers;
  - Brazil = Continental Dimensions;
  - Difficult access areas, like Amazon;
  - Device: battery life, Possible falls e Ergonomics.
- Mobility, Flexibility and Portability
Methodology

- Synchronization of information:
  - Synchronized with the server;
  - Guarantee safe information;
  - Server of the health service;
Methodology

- System adherence:
  - user-friendly + inspire confidence + accept by final users
  - Non-functional prototype: evaluate navigation;
  - Users actively participate in decisions and offer suggestions.
Methodology

- Software updates:
  - Country of continental dimensions;
  - Transparent to the user;
  - HW do not need understand the updating process.
Methodology

- Development technologies

- Apache Tomcat
- Java
- Android
- MySQL
Results

- 4 Modules:
  - Module of Collecting;
  - Module of Management;
  - Modules of campaigns and management;
  - Module of epidemiological mapping.
Module of Collecting

- Name: Edson das Neves Oliveira
- Birthday: 18/04/1982
- Gender: Masculino
- Occupation: Informática
- Vaccination Schedule

Referred Health Conditions

Job
Module of Management
Modules of campaigns and management

Screen computer

Tablet screen
Module of epidemiological mapping
Discussion/Conclusion

- Manual data collection:
  - 45 days to be completed (high operational cost);

- Automatized collection:
  - real time information access, identification of disease outbreaks;
  - Responsability of equipments;
  - Different levels of team training;
  - Time saved, used to take care of the patients, which is the true vocation of the family health team.
Thank you

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