MobiGuide: Homecare per Pazienti con Fibrillazione Atriale

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The MobiGuide Project

- Collaborative Large-scale integrating project, European Commission Seventh Framework Programme (2011-2015)
- **Guideline-based** intelligent DSS for patients requiring close monitoring
- The system accompanies patients wherever they go and helps them wherever they are through the constant application of clinical guidelines also outside the hospital thanks to the use of mobile devices

SEVENTH FRAMEWORK PROGRAMME

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The MobiGuide Project

- UNIVERSITY OF HAIFA (HU), Israel
- BEN-GURION UNIVERSITY OF THE NEGEV (BGU), Israel
- UNIVERSITA DEGLI STUDI DI PAVIA (UNIPV), Italy
- UNIVERSITEIT TWENTE (UT), Netherlands
- TECHNISCHE UNIVERSITAET WIEN (TUV), Austria
- MOBIHEALTH BV (MHBV), Netherlands
- FONDAZIONE SALVATORE MAUGERI CLINICA DEL LAVORO E DELLA RIABILITAZIONE (FSM), Italy
- UNIVERSIDAD POLITECNICA DE MADRID (UPM), Spain
- CORPORACIO SANITARIA PARC TAULI DE SABADELL (CSPT), Spain
- ATOS SPAIN SA (ATOS), Spain
- BEACON TECH LTD (BTL), Israel
- ZorgGemak BV (ZORG), Netherlands
- ASSOCIACIO DE DIABETICS DE CATALUNYA (ADC), Spain

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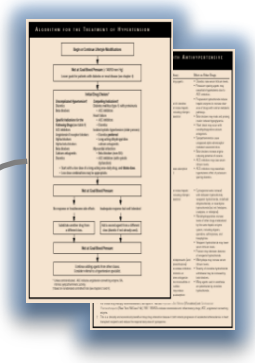
The MobiGuide System

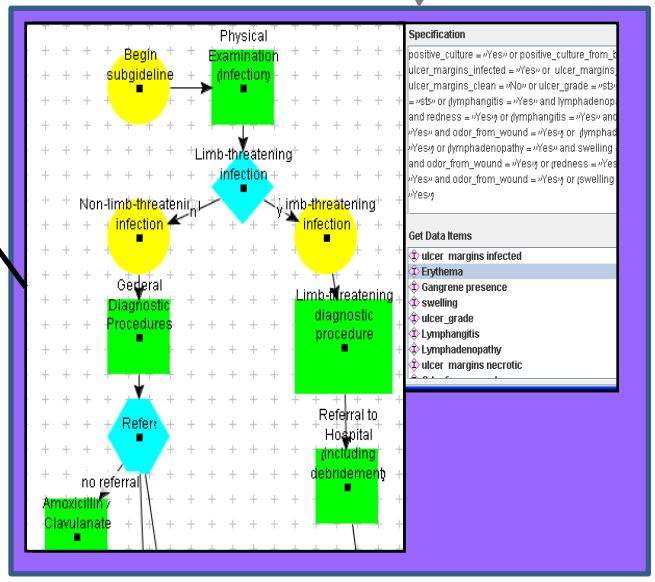


BAN

Projection & callback

DSS

Personalized



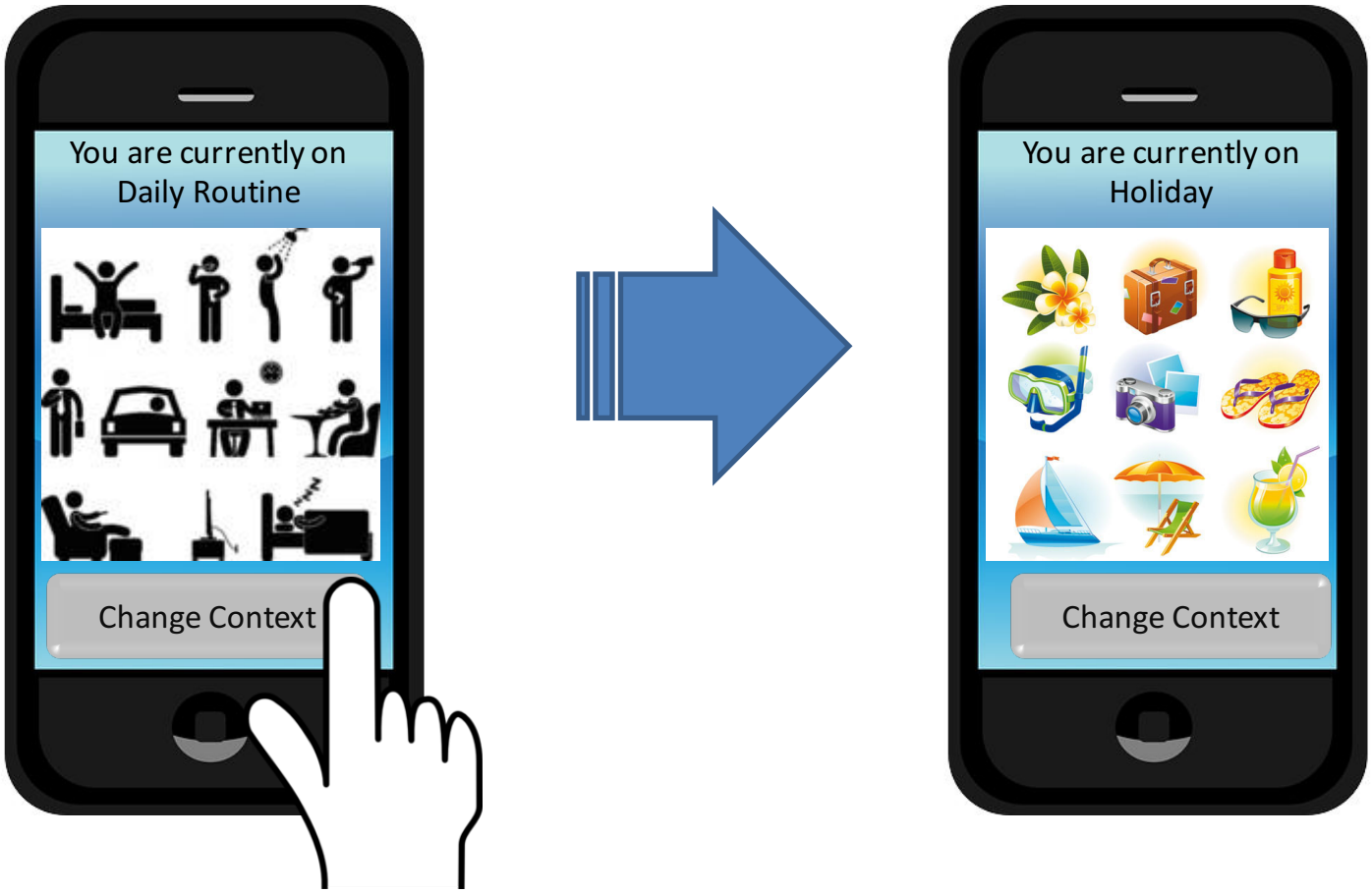
EMR1

EMR2

PHR

Knowledge base of Computer-interpretable guidelines (CIG)

Updating the Personal Context



With an easy change of context by the patient, the DSS will be able to provide recommendations coherently with the patient's current status

Distribution of Decision Support

- Central (Back-end DSS [BE-DSS], running on a central server)
  - –Full access to the patient's historical longitudinal data and to the complete medical knowledge base
  - –Capability of performing complex computations
- Local (Mobile DSS [mDSS], running on the patient's smartphone)
  - –solves the problem of over-burdening the central server computationally
  - –Enables robustness to connectivity problems -
  - –Sends Call back to the central-DSS

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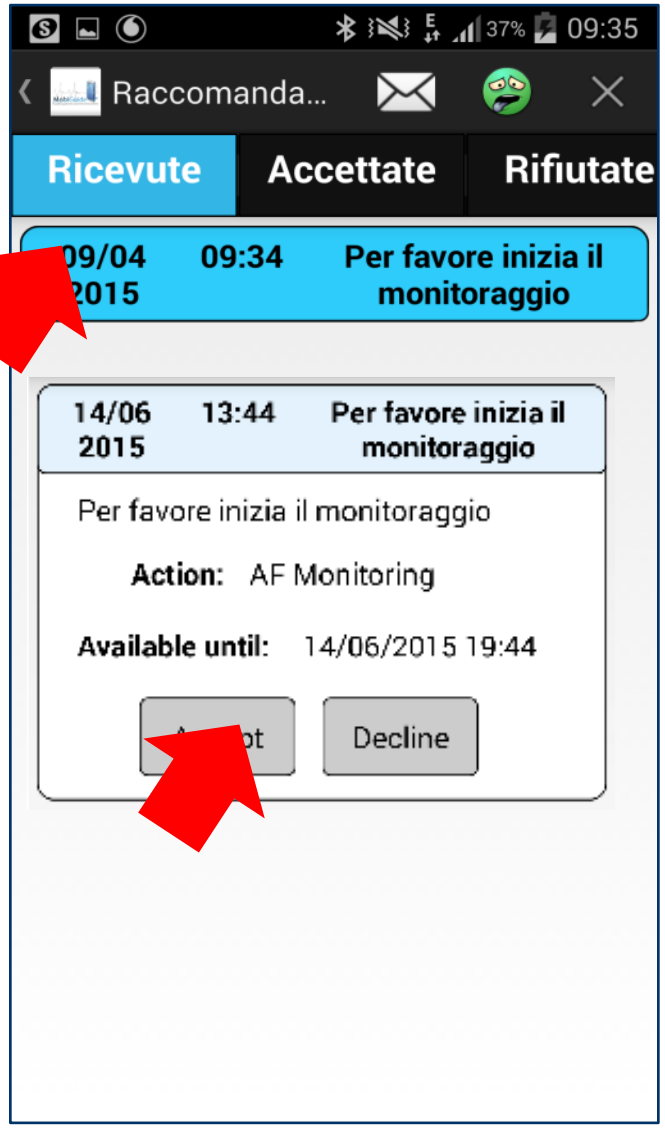

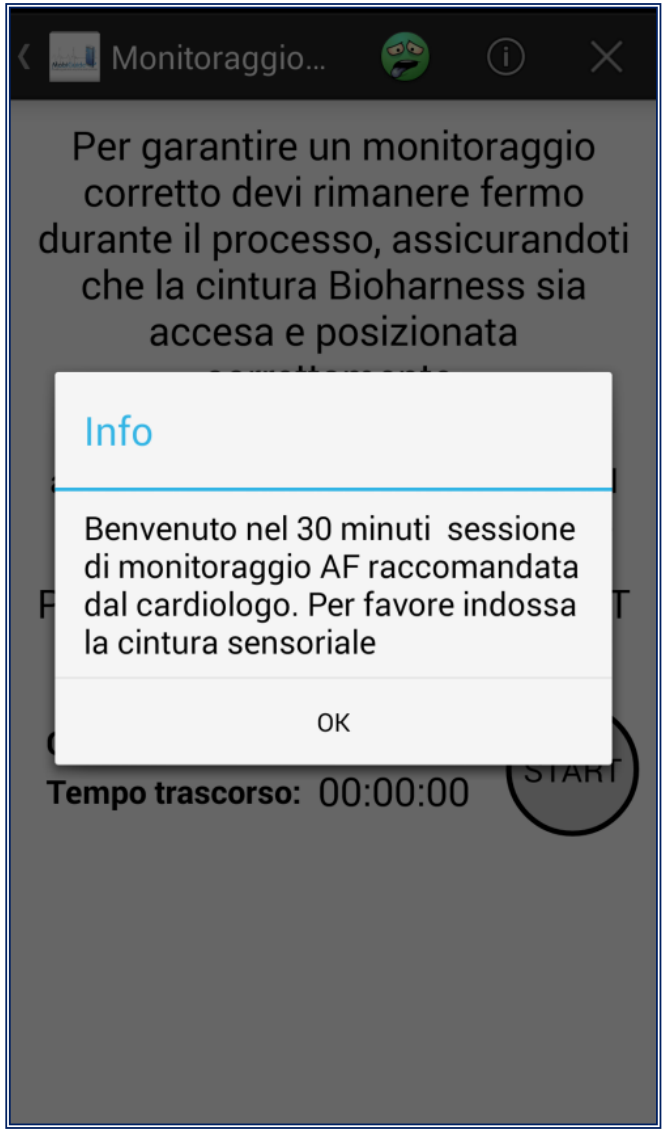

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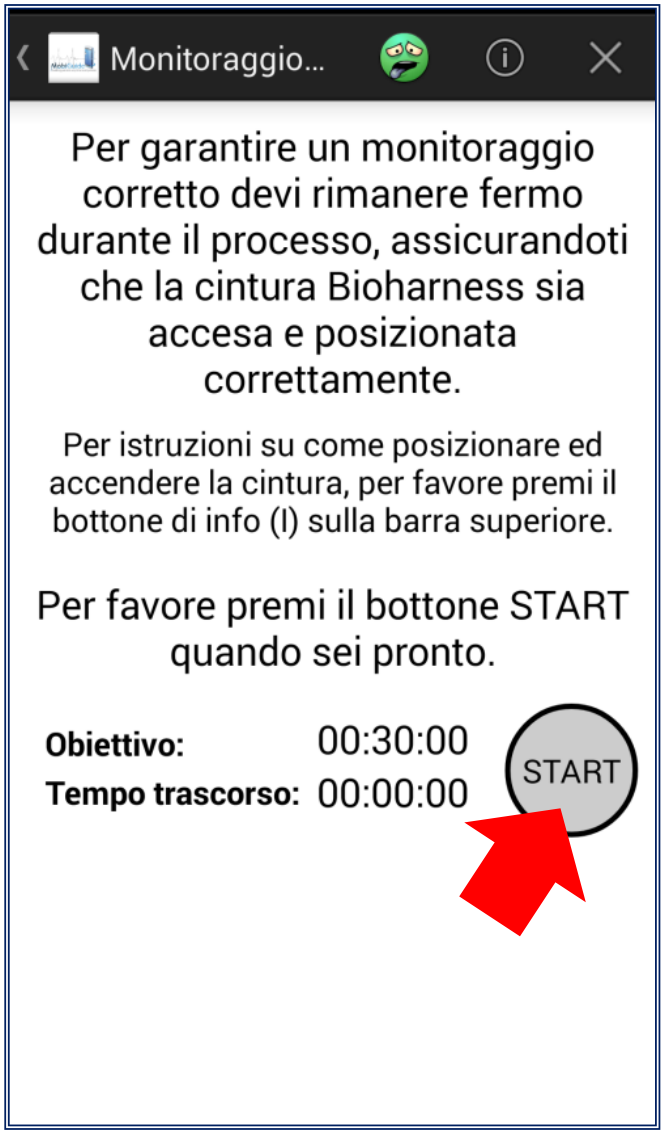

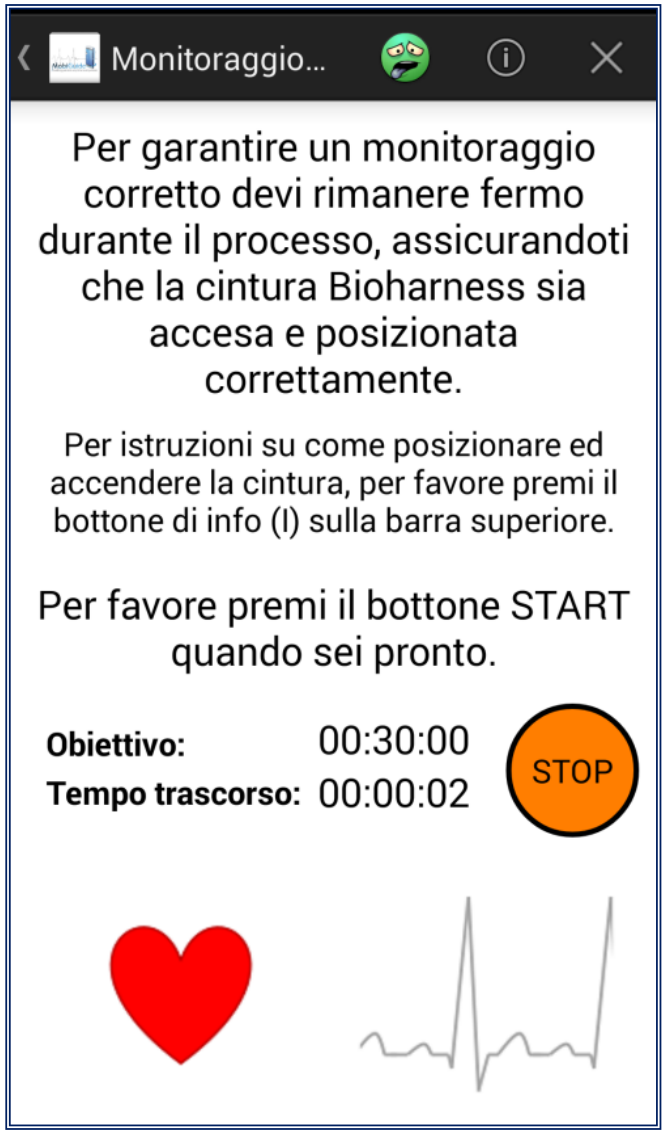

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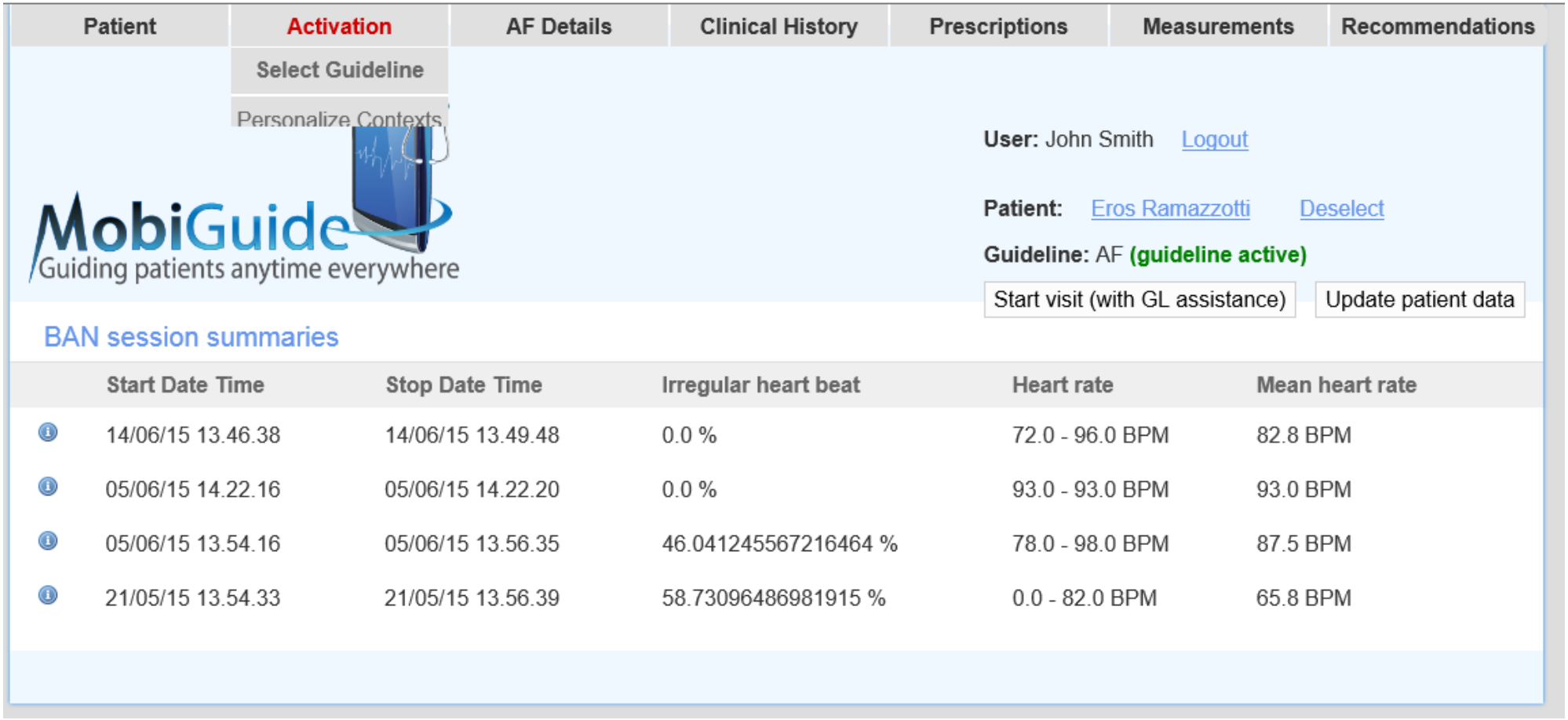
The Doctor's GUI



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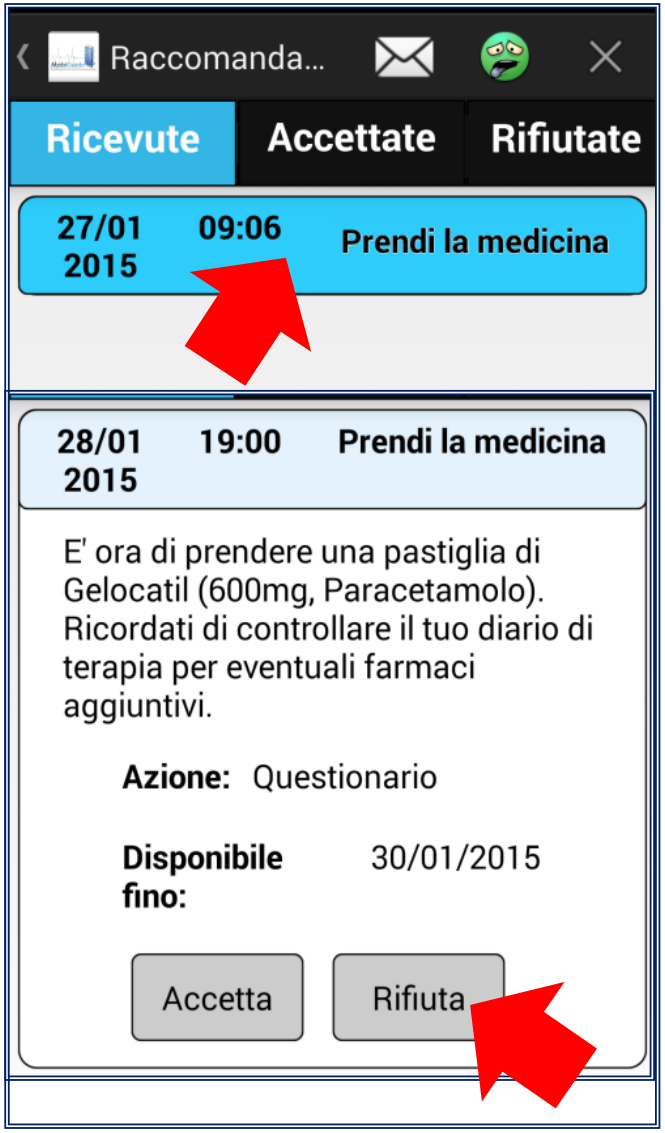

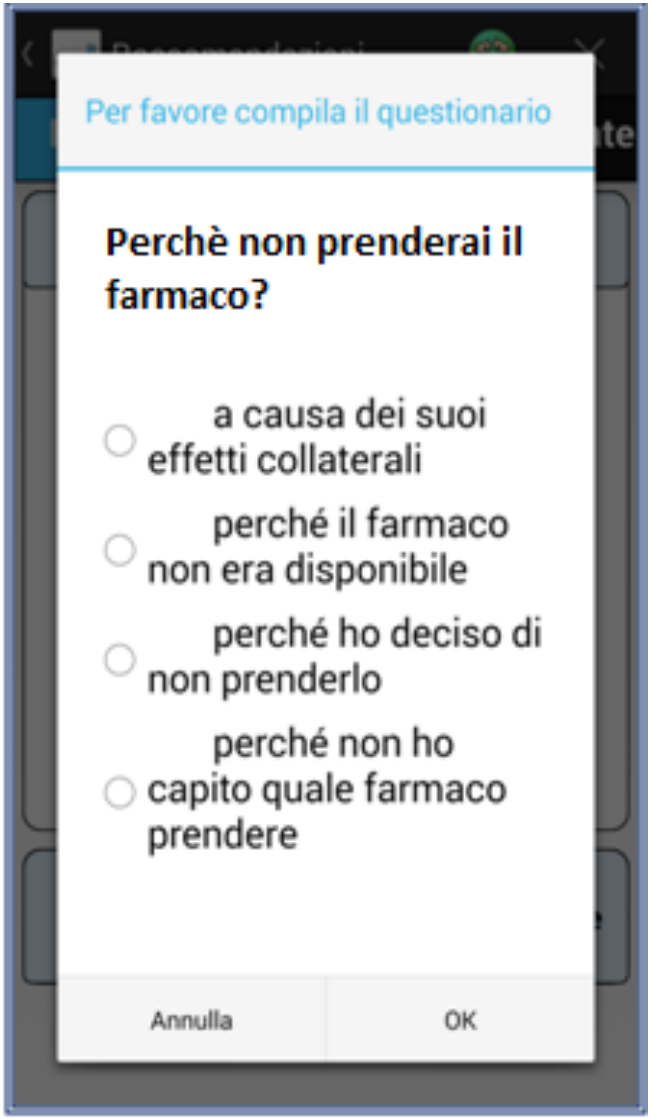

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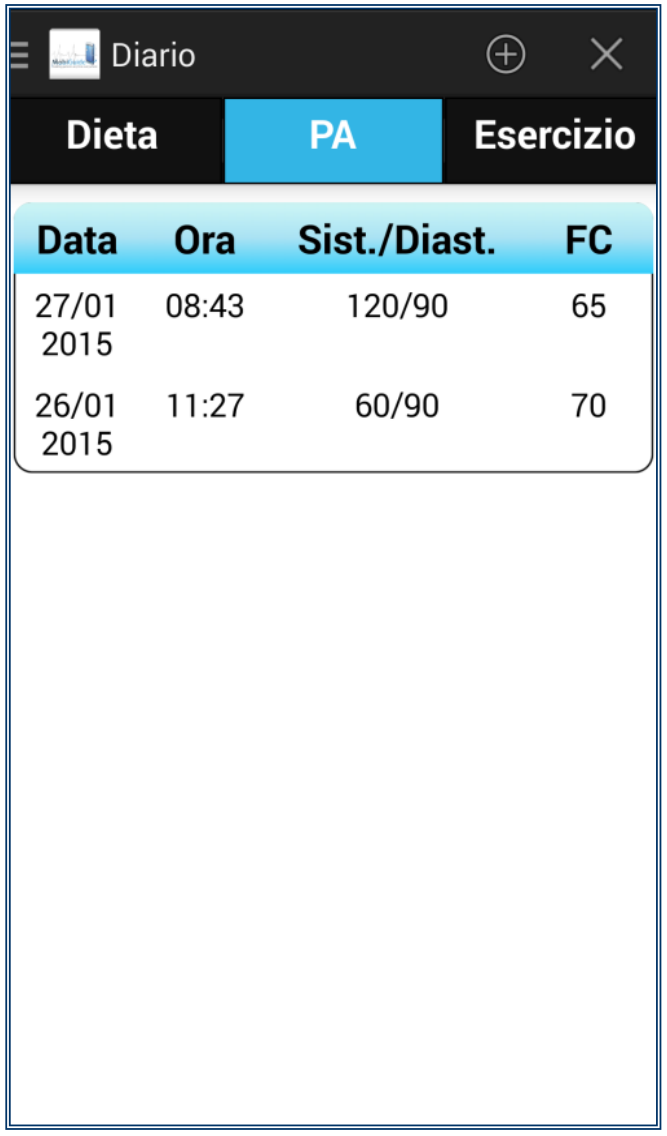

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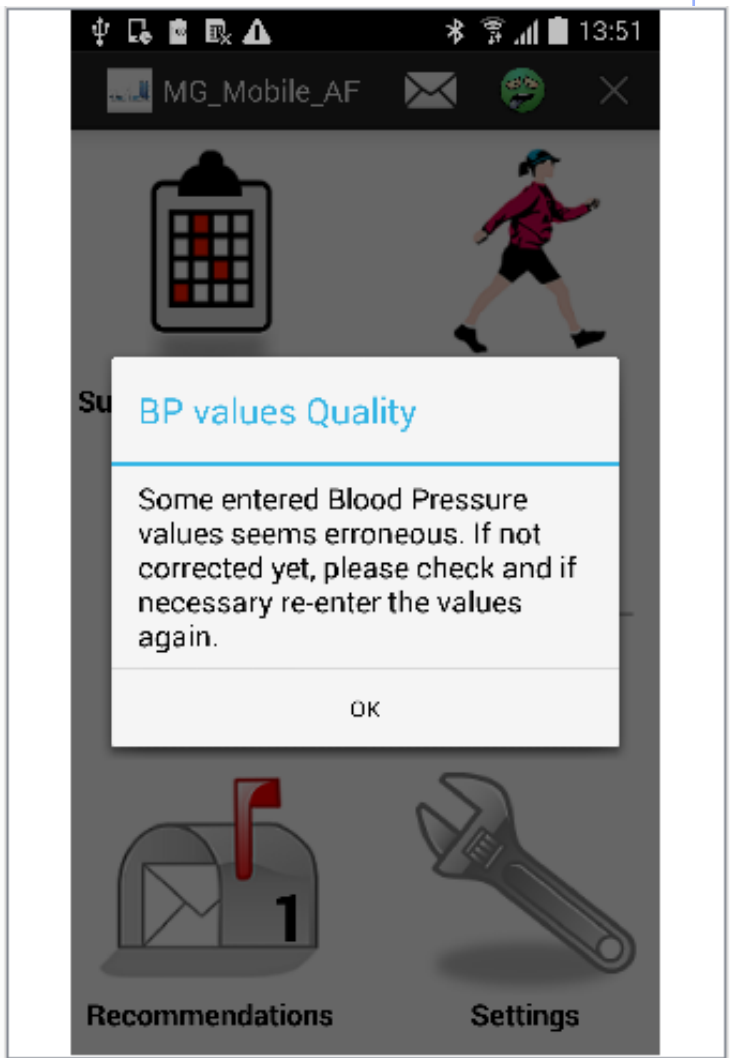

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Patient | Activation | AF Details | Clinical History | Prescriptions | Measurements | Recommendations

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User: John Smith Logout

Patient: Eros Ramazzotti Deselect

Guideline: AF **(guideline active)**

Start visit (with GL assistance) | Update patient data

Show Measurements

Date	Parameter	Value	Source
14/06/15 13.52.15	Systolic/Diastolic Blood Pressure	120.0/80.0 mmHg	Patient
14/06/15 13.52.15	Heart Rate	66.0 bpm	Patient
14/06/15 13.50.29	Systolic/Diastolic Blood Pressure	120.0/800.0 mmHg	Patient
14/06/15 13.50.29	Heart Rate	66.0 bpm	Patient
05/06/15 13.51.32	Weight	80.0 kg	Patient
05/06/15 13.43.05	Weight	80.0 kg	Patient
05/06/15 13.41.25	Diet	++ (Savoy cabbage)	Patient
05/06/15 11.17.48	Diet	+ (Spinach)	Patient
05/06/15 11.04.39	Systolic/Diastolic Blood Pressure	120.0/80.0 mmHg	Patient
05/06/15 11.04.39	Heart Rate	66.0 bpm	Patient
21/05/15 12.45.13	Systolic/Diastolic Blood Pressure	120.0/80.0 mmHg	Patient
21/05/15 12.45.13	Heart Rate	66.0 bpm	Patient

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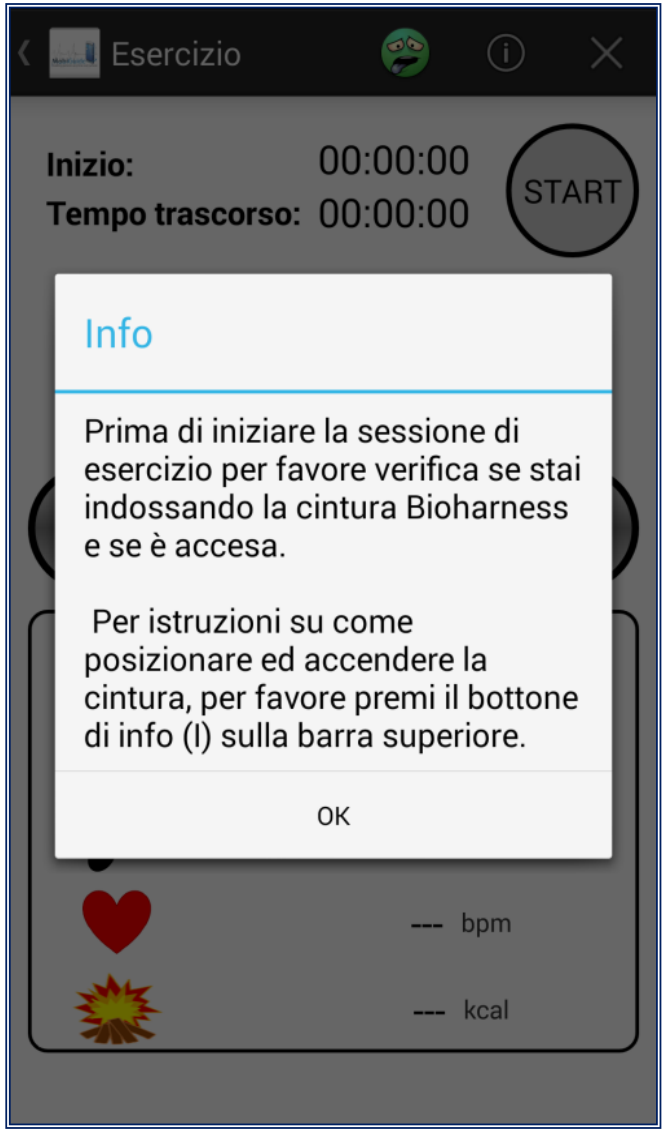

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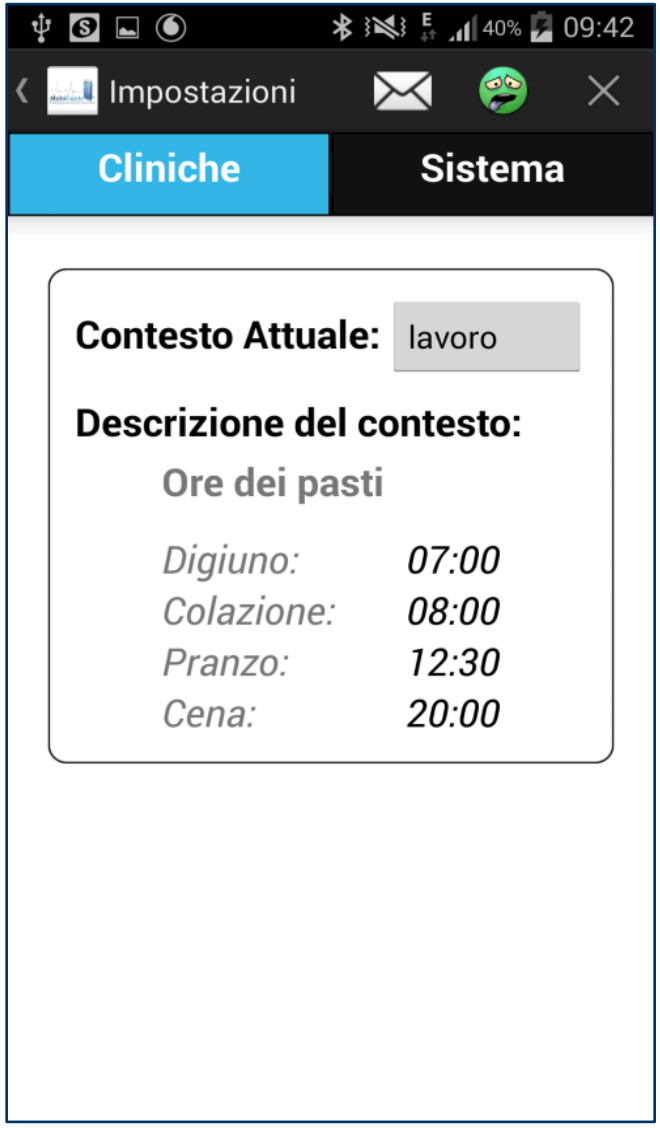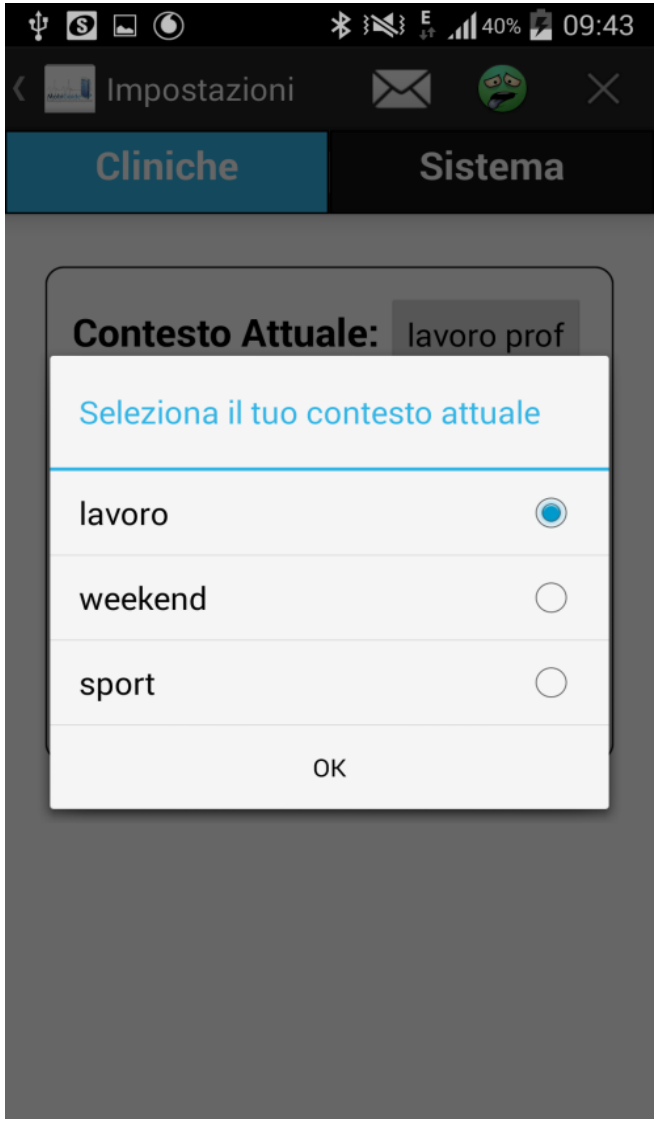
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