



**Philips Group Innovation, Research**  
High Tech Campus, Eindhoven

## Master graduation project: Personal Health Records for Cardiac Patients

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Start date: September 2012

Location: High Tech Campus, Eindhoven

### Introduction

Although the quality of care for patients with cardiac conditions has made enormous progress over the past decades, chronic cardiac patients are still often admitted to the hospital. Frequent readmissions to the hospital cause stress and anxiety for patients and their loved ones, and are a burden to the healthcare system. It is believed that many readmissions are preventable by better care as well as an earlier detection of the onset of worsening symptoms. Personal Health Records (PHRs) are platforms for patients to manage their own health status. They allow recording a user's health status and receiving tailored information. Moreover, PHRs can provide a means to communicate with care givers. However, despite these potential patient benefits, the uptake is still quite modest.

Chronic cardiac patients have been identified as a target group, who would potentially most benefit from assistance in managing their health information and receiving timely care based on the gathered information. Using a dedicated PHR-enabled application, patients can register their symptoms, are assisted with medication intake and may learn about their disease.

### Assignment

The assignment focuses at creating and implementing a PHR architecture, enabling the patient to manage his health information, and allowing selected care givers to access this information and communicate with the patient. The architecture should enable a proven means to access selected information in a secure and privacy preserving way.

### Recruitment

We are looking for university master students with a background in computing science. Knowledge of software architectures and security is required, while some interest in the medical domain is a plus. Creativity, commitment, a proactive attitude and own initiatives are important.

The project will be executed at the High Tech Campus in Eindhoven, an inspiring and creative environment with many graduate students from various disciplines. The student will benefit from a regular supervision by experienced researchers in the field. Students will work under guidelines applying at Philips Research in Eindhoven on a temporary contract. Students living and studying in the Netherlands will receive a monthly allowance for a graduation project. Students do not get a contribution in travel costs. *For students from abroad, other rules apply.*

**For additional information, please contact:**

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