PMA

**PERSISTENT**

# Personal Medical Advocate Assisting Patients with Medical Essentials

## Inside:

## Executive Summary

Personal Medical Advocate provides both a systematic and efficient approach for managing a collection of information about a patient's health. If you have a shot record or a box of medical papers, you already have a basic personal health record and you've probably encountered the big drawback on keeping track of paper records. PMA bridges the gap between the patient and their medical requirements, which are more often than not, unknown to the patient until a meeting with the doctor. PMA uses two different methodologies: it uses a "Predictive Workflow" that leverages patient medical records, and health data to alert the end-user of potential health risks for that patient. It also incorporates a "Reactive Workflow" that allows the end-user to respond to an emergency triggered by the patient. These methodologies ensure that patients of the PMA system are provided with the highest quality medical care available.

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## Introduction

PMA employs a "Predictive Workflow" to perform systematic computation and analysis based on medical records, and aggregated data gathered from a heart rate monitor device. It allows detection of abnormalities in the patient's medical history. An abnormality in statistics triggers a set of events from notifying the patient's point-of-contact via text message, to PMA scheduling an appointment for a hospital visit and forwarding the following information to the patient through email and text message.

PMA employs a "Reactive Workflow" wherein the patient has the ability to trigger an emergency call for help via a mobile application. This immediately sets off an asynchronous call to a service called Active911 that redirects the emergency to the necessary respondents to the patient's location. It also sends a text message to the patient's point-of-contacts with the emergency information along with details of the nearest hospital within the patient's vicinity at the time of incident. Lastly, it creates an xml document containing details about the patient, and emergency information that can be used by doctors or the insurance company.
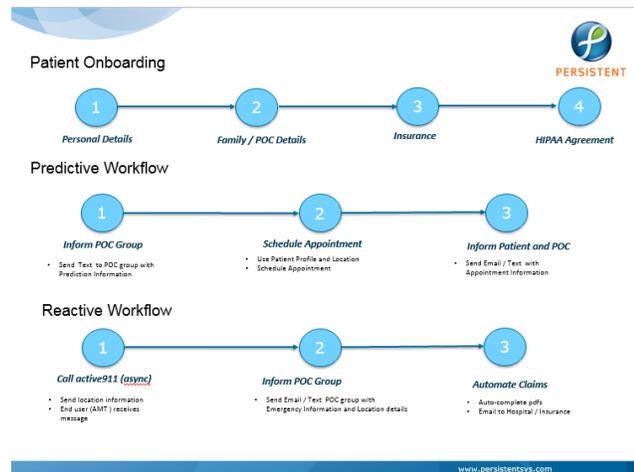


## Key Features

- Triggers the process by receiving an event from a mobile application.
- Finds the geolocation of the incident and provides information for the nearest hospital.
- Dynamic scheduling of appointments with doctors.
- Monitoring of patient's heart rate via wearable heart rate monitoring device.
- Report-driven design aggregating data into more meaningful nuggets to prevent information overload.
- Real-time validation of email, personal, and emergency contact information whether active or inactive.
- Sends text messages to point-of-contacts in an event of incident.
- Intuitive mobile interfaces accessible on Android and IOS devices.
- Dynamic grid view for patient's record that shows daily activity and alerts.
- Algorithm for triggering an alert based on aggregated medical data.

## Conclusion

Your "Personal Medical Advocate" adopts a record-driven design pattern that provides comprehensive and intuitive data to the end-users, eliminating the complexity that comes with trying to read and understand medical data. Real-time computation of data tracks abnormalities in a patient's medical record and automatically triggers an alert to respondents. We constantly listen for an emergency that is triggered by a patient at any moment and anywhere they may feel in distress, simultaneously dispatching respondents to the location.

Your "Personal Medical Advocate" allows a patient to focus on living and enjoying life to the fullest. It relieves any thoughts that may be lingering in the back of the patient's mind about their health issues with the security that someone is looking out for them.

## About Persistent Systems

Persistent Systems (BSE & NSE: PERSISTENT) builds software that drives our customers' business; enterprises and software product companies with software at the core of their digital transformation. For more information, please visit: www.persistent.com

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