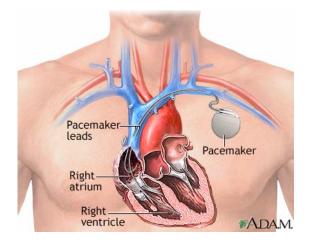
# The Pacemaker

Molly Magee, Biomedical Engineering, University of Rhode Island BME 181 Second Presentation, April 15, 2013 <molly magee@my.uri.edu>

## I. INTRODUCTION

HE Pacemaker was introduced in the 1930s with the Hyman Pacemaker. In the 1950s, the first working pacemaker implant was introduced. A Pacemaker is a small device that is placed in the chest to help control abnormal heart rhythms. It uses pulses to help the heart beat at a normal rate.



#### II. ABOUT

The Pacemaker has two parts to it. There is the pulse generator, which stores the battery and a tiny computer. Also, there are the leads. The leads are the wires that are threaded through the veins into the heart and implanted into the heart muscle.

Pacemakers can come in different types also. There is the single chamber, which has one lead. The Dual Chamber pacemaker has one lead in the atria and one in the ventricle. The Biventricular pacemaker has three leads.



### **III. DISCUSSION**

The Pacemaker has contributed a lot to our society. It has helped many people with heart issues live a little bit longer. The cost of a pacemaker in the United States can run from \$5,400 to \$14,000. It's much cheaper in other countries, but insurance can cover part of it. The Revo MRI sure-scan is allowing the patient to have an MRI without having any damage. Also, professionals are trying to make the pacemaker smaller and wireless. So it will be more comfortable, no surgery, and easier.



#### REFERENCES

- [1] INational Heart, Lung, and Blood Institute www.nhlbi.nih.gov/health/health-topics/topics/pace/
- [2] IWebMD www.webmd.com/heart-disease/guide/abnormal-rhythmspacemaker
- [3] IMedical Tourism Guide www.medicaltourismguide.com/procedures/medical/pacemaker/
- [4] About.com "The Heart" <www.biology.about.com/od/anatomy/a/theheart.htm