

Healing the Hearts of the World: The Invention of the First Internal Pacemaker

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Junior Division

Group Website

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For our National History Day project, we chose the making of the first internal cardiac pacemaker. We chose this topic for a number of reasons. First, there was an obvious medical technology barrier that was broken, and we also had multiple personal connections. One member of our group's father has a pacemaker, and another member's father's friend had his NBA career cut short because of his pacemaker. We also wanted to do our project on a unique topic that was unfamiliar to many people.

Once we decided on the topic, we began to research more about it on the internet to further educate ourselves. We then went to our local library to look for books and articles. We learned more about the history of the pacemaker including who invented it, the early research, the people who developed it, and how the device has evolved over the years. We also learned more about when and how they are used today, including the different types of pacemakers and the risks and benefits of each device. While reading the information we took notes to remember important information. We also conducted three interviews for our primary sources. Together we made a list of questions to ask. One member of our group interviewed his father, and another member interviewed a former NBA player as well as a Mayo Clinic internal medicine physician. The videos were edited and uploaded to the website. We divided our project into sections to stay organized and so we could do some independent work. Our sections included history, pacemakers today, external pacemakers, internal pacemakers, pacemaker pioneers, conclusion and the process paper.

We selected the website category for a number of reasons. We wanted to learn how to make our own website, and we wanted to be able to work on the project

independently if needed. We also knew that we would be doing interviews and a website was the best way to feature them. To create our project, first, each of us independently created a web central account using the NHD website. We assigned the sections to create the website, and we created a navigation bar to organize the pages. We further illustrated our project with pictures, videos, and quotes.

The invention of the implantable cardiac pacemaker broke the barrier of primitive medical technology and has saved millions of lives since it was developed. In 1958, when it was invented, people suffering from certain types of cardiac diseases had no promising treatment options. The external cardiac pacemaker was being developed, but it was painful and forced people to live a sedentary lifestyle. The internal pacemaker controls an irregular heart rhythm allowing cardiac patients to live full and productive lives with few side effects. About one million people receive pacemakers worldwide every year, making it one of the most significant and impactful medical inventions to date.