



Cybersecurity Presentation

By: Thomas Ramsey



Topic

What:

St Jude's Hackable Cardiac Devices

When:

January 9, 2017

Where:

All around the world



ST. JUDE MEDICAL™

St. Jude's Medical

- Medical device production company
- Recently obtained by the company Abbott Laboratories



Use of the device

St Jude's Medical implantable cardiac device

- Used to regulate slow and fast heart rates.
- Implanted under the skin in the chest area with insulated wires called 'leads' that connect to the heart.
- Works in conjunction with the Merlin@Home transmitter which connects the devices to the physicians



Merlin@home Transmitter

- Connects the implanted cardiac devices to the patient's physician through the Merlin.net patient care network.



What was wrong?

- It was discovered that there was vulnerabilities in security of the transmitter
- These vulnerabilities were discovered by the company MedSec



Solutions

After finding the security breach:

- St. Jude released a firmware update for the transmitters.

Before the security breach

- Run extensive testing on the hackability of the transmitter before presenting it to the consumers.

References

<https://www.meddeviceonline.com/doc/abbott-completes-billion-purchase-of-st-jude-medical-0001#:~:targetText=Abbott%20Completes%20%2425%20Billion%20Purchase,Jude%20Medical&targetText=Abbott%20Laboratories%20has%20formally%20completed,bolster%20its%20cardiovascular%20device%20offerings.>