

I choose the medical implants case study, The article "Case: Medical Implant Risk Analysis" from the ACM Code of Ethics and Professional Conduct website discusses the ethical implications of a medical technology startup called Corazón that develops implantable heart health monitoring devices. (Association for Computing Machinery (ACM). N.D)

The AAMCNEWS article discuss how two hackers, Barnaby Jack and Charlie Miller, demonstrated that they could hack into implantable insulin pumps and pacemakers. This led the FDA to issue its first guidance on cybersecurity and medical devices in 2013. (Jaret ,N.D).

The ACM and BCM codes are relevant to this article because they both address the importance of cybersecurity. The ACM Code of Ethics states that "computer professionals should strive to prevent the misuse of computer resources." The BCM Code of Ethics states that "biomedical engineers should promote the safe and effective use of biomedical technology." Both codes would support the need for strong cybersecurity standards for medical devices. (Association for Computing Machinery (ACM). N.D & Bcs.org, 2022)

There is a common concern for computing professionals who discover security vulnerabilities are, they may be afraid of retaliation from their employer or from the company that developed the software. However, it is important for computing professionals to report security vulnerabilities, even if they are afraid of the consequences. By failing to report a security vulnerability, computing professionals could put people at risk of harm. (Scroxtton, 2020)

Overall, the case study of medical implant risk analysis highlights the importance of ethical computing in the development and use of medical devices. Computing professionals have a responsibility to use their skills for the benefit of society and to avoid harm to others. They also have a responsibility to be honest and trustworthy, and to act in the best interests of their employers and client.

Reference:

Association for Computing Machinery (ACM). N.D ACM Code of Ethics and Professional Conduct. Available from <https://www.acm.org/code-of-ethics> [Accessed on Aug 10 2023]

Association for Computing Machinery (ACM). (N.D). Case Study: Medical Implant Risk Analysis. Available from: <https://ethics.acm.org/code-of-ethics/using-the-code/case-medical-implant-risk-analysis/>[Accessed on Aug 10 2023]

Bcs.org, 2022. CODE OF CONDUCT FOR BCS MEMBERS. Available From: <https://www.bcs.org/media/2211/bcs-code-of-conduct.pdf> [Accessed on Aug 10 2023]

Peter, J. (N.D). Exposing Vulnerabilities: How hackers could target your medical device. Available from: <https://www.aamc.org/news/exposing-vulnerabilities-how-hackers-could-target-your-medical-devices> [Accessed on Aug 08 2023]

Alex, S. (2020). Security pros fear prosecution under outdated UK Laws. Available from: <https://www.computerweekly.com/news/252492416/Security-pros-fear-prosecution-under-outdated-UK-laws> [Accessed on Aug 08 2023]