Discussion Topic: Codes of Ethics and Professional Conduct

by Alex Mutebe - Saturday, 4 May 2024, 2:36 PM

The case of Medical Implant Risk Analysis cites Corazón's actions having far-reaching implications, affecting legal compliance, patient trust, equity, and professional conduct (ACM,2018; BCS,2022). While many patients still find medical technology to be a useful therapeutic option, it's important to recognize that there may be drawbacks to this technology as well (Carrión-Camacho et al.,2019).

Corazón's vulnerability in the wireless connectivity could potentially lead to legal repercussions. Corazón's technical leaders consulted with the researcher regarding the vulnerability. However, if they downplayed the risk without proper mitigation, it could be seen as a lack of respect for patient safety and the organization's reputation. This is a violation of the principle "Respect the Organisation or Individual You Work For" (BSC,2022).

De Maria et al. (2018) argue that if a patient's health is compromised due to an attack exploiting this vulnerability, Corazón might face lawsuits or regulatory penalties. By not adequately addressing this vulnerability in the wireless connectivity could potentially compromise patient safety. As a result, they may have violated the BCS principle of making "You Make IT for Everyone".

Reduced Device Adoption can have a social impact especially when patients lose trust due to security concerns, they might be discouraged from using potentially life-saving implantable devices. This could negatively impact their health and quality of life by limiting access to vital medical technology (Dobrzański et al., 2021)

Overlooking a hard-coded initialization value in cryptographic algorithms and encryption for data transfer indicates a gap in understanding security best practices by Corazón. This is in violation of the principle "Show What You Know, Learn What You Don't".

## References:

Carrión-Camacho, M.R., Marín-León, I., Molina-Doñoro, J.M. and González-López, J.R., 2019. Safety of permanent pacemaker implantation: a prospective study. Journal of clinical medicine, 8(1), p.35.

De Maria, C., Di Pietro, L., Lantada, A.D., Madete, J., Makobore, P.N., Mridha, M., Ravizza, A., Torop, J. and Ahluwalia, A., 2018. Safe innovation: On medical device legislation in Europe and Africa. Health Policy and Technology, 7(2), pp.156-165.

Dobrzański, L.A., Dobrzańska-Danikiewicz, A.D. and Dobrzański, L.B., 2021. Effect of biomedical materials in the implementation of a long and healthy life policy. Processes, 9(5), p.865.

BCS. (2022). CODE OF CONDUCT FOR BCS MEMBERS. Available from https://www.bcs.org/media/2211/bcs-code-of-conduct.pdf [Accessed 4rd May 2024].

ACM (2018). ACM Code of Ethics and Professional Conduct. [online] Association for Computing Machinery. Available from: https://www.acm.org/code-of-ethics.